



## Biomarker quantitation assay guide

Quantitate protein:

ELISA | Antibody pairs | ProQuantum HS immunoassays | ProcartaPlex immunoassays

Quantitate mRNA:

QuantiGene multiplexed gene expression assays

# IL-17A

The Invitrogen™ portfolio offers a variety of assays for quantitation of single proteins and mRNA as well as mix-and-match and ready-to-use panels for correlated multiplexing using the Luminex® platform. Our extensive selection of Invitrogen™ assays includes:

- ELISA and antibody pair kits
- ProQuantum™ high-sensitivity immunoassay kits
- ProcartaPlex™ multiplex immunoassay kits
- QuantiGene™ Plex gene expression assays

Additionally, Thermo Fisher Scientific supports your quantitation assay needs with accessory reagents and instruments for a comprehensive offering. Use this guide to help identify your needs, then contact your sales representative if you have questions or go to [thermofisher.com/quantitatebiomarkers](http://thermofisher.com/quantitatebiomarkers).

# L-6

# TNFD

# VEGF

# Contents



Biomarker background	4
Biomarker quantitation assay platforms	7
Single-analyte quantitation	
ELISA kits	9
Antibody pair kits	11
Accessory reagents and equipment	12
ProQuantum high-sensitivity immunoassay kits	14
Multianalyte quantitation	
Luminex xMAP technology	17
ProcartaPlex multiplex immunoassay kits	19
ProcartaPlex high-sensitivity immunoassay kits	28
Immunoassay Special Services	29
ProcartaPlex mix-and-match panels	30
Multiplexed gene expression assays	32
QuantiGene Plex assays	32
Additional gene expression solutions	38
Comprehensive immunoassay product listing	40

# Biomarker background

## Highly referenced kits you can trust

We proudly offer a selection of quantitation assays for the measurement of protein and RNA as biomarkers in key disease research areas. From single-analyte analysis through multiple ELISA formats to multiplex quantitation using Invitrogen™ ProcartaPlex™ and QuantiGene™ Plex assays for the Luminex® platform, you can study the mechanisms of disease pathways from expression of the gene to the protein.

This guide describes all of the options available for single-analyte and multianalyte assays, as well as showing the correlation between these assays. With high correlative values between these various assays, you have the flexibility to use the assay you need to continue your research and publish with confidence.

### **Assays within these areas of research assess cellular mechanisms from basic drug discovery to development**

- Adaptive and innate immunity
- Adhesion and migration
- Angiogenesis
- Apoptosis
- Bone biology
- Cancer biology and immuno-oncology
- Cardiac proteins for arteriosclerosis and atherosclerosis
- Cell cycle and proliferation
- Cell signaling and cell structure
- Cytokines, chemokines, and growth factors
- Metabolism
- Neurobiology
- Stem cell biology
- Transcription factors

## The importance of biomarker quantitation assays

As part of the immune response, inflammation plays an important role in defending the body against pathogens, such as viruses, bacteria, fungi, and other parasites. However, inappropriate activation of inflammatory processes is an underlying contributor to many common pathological conditions. For example, autoimmune conditions arise when our immune system mistakes our cells or tissues for non-self antigens and attacks them. In addition, studies show that tumor proliferation and metastasis may occur when inflammatory cytokines create a microenvironment conducive to cancer progression. Figure 1 shows a simplified representation of cytokine interactions during inflammation.

### **Acute versus chronic inflammation**

Acute inflammation is a short-lived response that is characterized by extravasation of leukocytes, erythrocytes, and plasma components into the injured tissue. If left unchecked, the acute inflammatory process can lead to chronic inflammation.

Unlike acute inflammation, chronic inflammation is characterized primarily by tissue infiltration of lymphocytes and macrophages. Chronic inflammation is closely associated with allergy, atherosclerosis, cancer, arthritis, and Alzheimer's disease, as well as autoimmune diseases. The process of acute inflammation is well defined, but the causes of chronic inflammation and its associated molecular and cellular pathways are still not well understood [1].

## Inflammation research

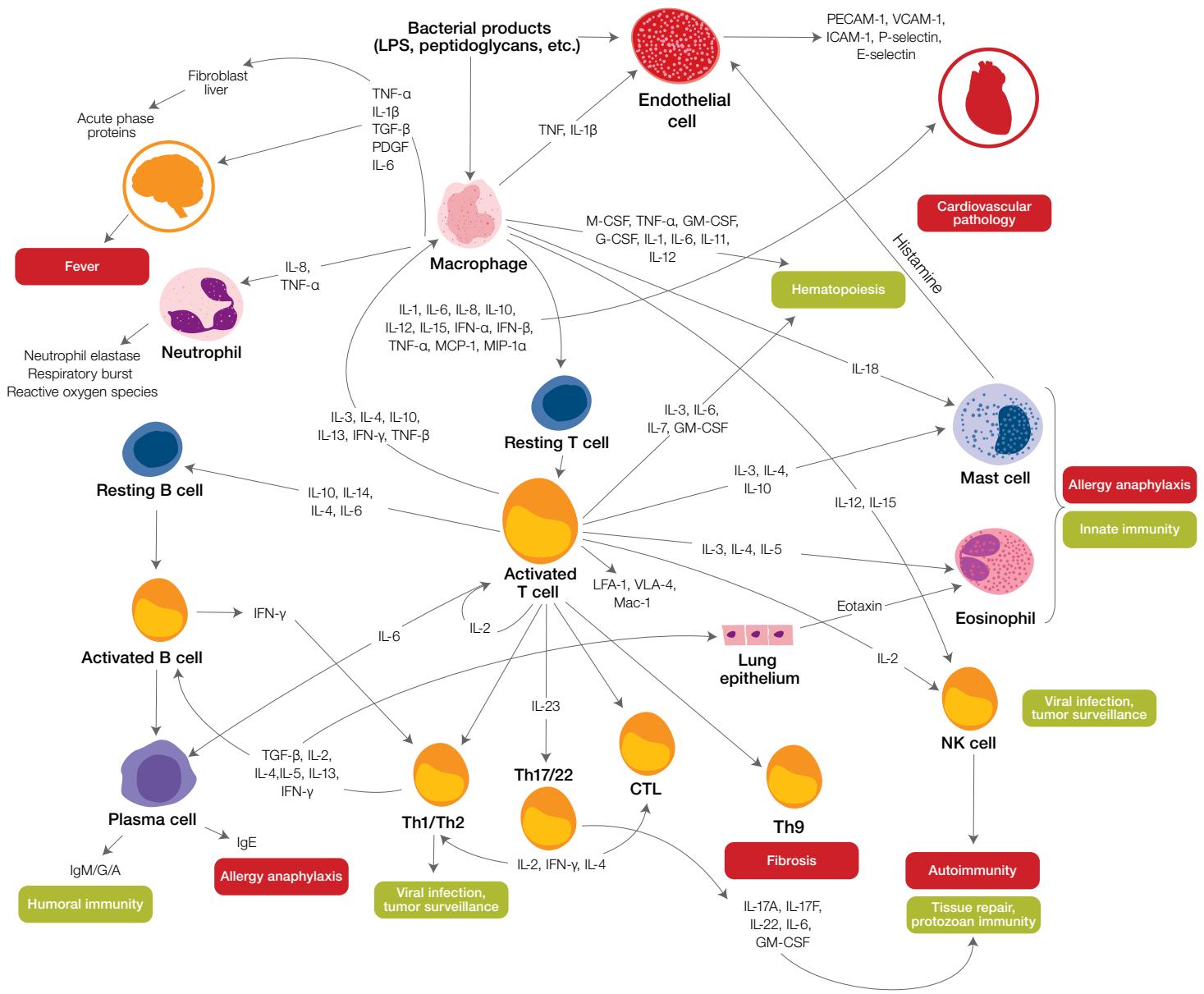


Figure 1. Interaction of cytokines during inflammation.

## The critical balance between pro- and anti-inflammatory mediators

The overall effect of an inflammatory response is dictated by the balance between pro- and anti-inflammatory mediators (Table 1).

Pro-inflammatory cytokines such as IL-1 $\beta$ , IL-6, and TNF- $\alpha$ , are responsible for early responses and amplify inflammatory reactions, whereas anti-inflammatory cytokines, which include IL-4, IL-10, and IL-13, have the opposite effect in that they limit the inflammatory reactions (Table 1). The increasing complexity of pro- and

anti-inflammatory cytokine and chemokine networks has made it crucial to examine them in relevant functional groups rather than individually (Figure 1, page 5).

To facilitate the investigation of inflammatory and other biologically relevant biological markers, the Invitrogen™ portfolio has a broad menu of immunoassays to easily detect and quantify proteins, and to facilitate tracking gene expression of RNAs with the QuantiGene Plex assays. Products are available for important research areas, including immunology, neurobiology, cancer, cardiovascular diseases, metabolism, and more.

**Table 1. Pro- and anti-inflammatory mediators [2].**

Pro-inflammatory mediators		
• Cell-surface CD14	• Leukemia inhibitory factor	• Prostacyclins
<b>Anti-inflammatory mediators</b>		
• Free radical generation	• Monocyte chemoattractant protein-1	• Prostaglandins
• IL-1 $\beta$	• Monocyte chemoattractant protein-2	• Protein kinase
• IL-2	• Neopterin	• Soluble adhesion molecules
• IL-6	• Neutrophil elastase	• Thromboxane
• IL-8	• Phospholipase A2	• TNF- $\alpha$
• IL-15	• Plasminogen activator inhibitor-1	• Tyrosine kinase
• IFN- $\gamma$	• Platelet activating factor	• Vasoactive neuropeptides
• Epinephrine	• Leukotriene B4 receptor antagonists	• Soluble TNF- $\alpha$ receptors
• IL-4	• LPS binding protein	• Transforming growth factor- $\beta$
• IL-10	• Soluble recombinant CD-14	• Type II IL-1R
• IL-13		
• IL-1RA		

## Plate- and bead-based solutions for your research needs across many species

Human, mouse, rat, nonhuman primate, canine, porcine, bovine, equine, and feline

The Invitrogen portfolio of immunoassay products supports the evolution of research projects by offering multiple platforms that provides the freedom to scale from ELISA to multiplex assay based on project needs. Adding QuantiGene Plex assays to the workflow can provide an accurate and precise method for multiplexed gene expression quantitation, using Luminex® xMAP® technology.

- Keep your research relevant by incorporating analytes pertinent to your area of work at any point within your study
- Conserve resources by using existing data from previous experiments

# Biomarker quantitation assay platforms

## Tailored to meet your needs

A variety of ELISA kit formats are available that include complete, ready-to-use kits as well as preoptimized reagents to make your own. A variety of singleplex and multiplex panels for the Luminex platform are also available. See Table 2 for a performance comparison of our immunoassay platforms and Table 3 for a component list.

- **Invitrogen™ coated ELISA kits**—Quantitate with confidence. Highly verified ELISA kits with precoated plates provide lower inter- and intra-assay variability with ready-to-use reagents that help ensure consistent data.
  - **Invitrogen™ Instant ELISA kits**—Fewer steps and hands-on time to increase productivity. The one-wash ELISA introduces fewer handling steps.
  - **Invitrogen™ phosphospecific ELISA kits**—Measure phosphospecific proteins in cell lysates.
- **Invitrogen™ antibody pair kits**—Keep costs low with our affordable coat-it-yourself ELISA plate set. Each set contains the reagents required to prepare and run the

ELISA, including ELISA-optimized matched antibody pairs, standards, detection reagents, coating buffers, sample diluent, and tetramethylbenzidine (TMB) substrate solution. Plates are optional.

- **ProQuantum high-sensitivity (HS) assay kits**—Take advantage of a platform innovation that provides researchers with an easy-to-run, high-performance assay, utilizing proximity-based amplification technology to combine the analyte specificity of high-affinity antibody–antigen binding with the signal detection and amplification capabilities of real-time PCR to achieve a highly sensitive protein quantitation assay, using very small sample volumes.
- **ProcartaPlex multiplex immunoassays**—Quantitate more with less sample. ProcartaPlex multiplex immunoassays utilize Luminex xMAP technology for the biomarker profiling of up to 65 analytes in a single 25–50 µL sample.

**Table 2. Characteristics of our immunoassay kits.**

	Type of immunoassay					
	Build-it-yourself immunoassays	Antibody pair kits	Coated ELISA kits*	Instant ELISA kits	ProQuantum HS kits	ProcartaPlex immunoassays**
Ready-to-use reagents	No; need overnight coating process	Yes; need overnight coating process	Yes	Yes	Yes	Yes
Analytical sensitivity†	<10 pg/mL	<10 pg/mL	<10 pg/mL	<5 pg/mL	<0.1 pg/mL	<10 pg/mL
Dynamic range†	<5–250 pg/mL	<5–500 pg/mL	<5–250 pg/mL	<7.8–500 pg/mL	0.064–5,000 pg/mL	<5–2,000 pg/mL
Sample volume	10–100 µL	10–100 µL	10–100 µL	25–50 µL	2–5 µL	25–50 µL
Incubation time†	4 hr	3–4.5 hr	2.5–4 hr	4 hr	2 hr	3.5 hr
Multiplexibility	No	No	No	No	No	Yes
Number of targets measured per well	1	1	1	1	1	1–65
Readout	HRP-TMB (colorimetric)	HRP-TMB (colorimetric)	HRP-TMB (colorimetric)	HRP-TMB (colorimetric)	FAM™ (fluorescence)	RPE (fluorescent)
Instrumentation needed	Microplate reader	Microplate reader	Microplate reader	Microplate reader	RT-PCR	Luminex® instrument (Luminex® 100/200™, MAGPIX®, or FLEXMAP 3D® system)
Instrument read time	2 min	2 min	2 min	2 min	36–72 min	20–60 min

\* Values in this table refer to standard colorimetric kits. Ultrasensitive kits are also available.

\*\* Immunoassays for the Luminex platform.

† Every assay has its own specifications. Please consult the protocol for your specific immunoassays or kits.

Go to [thermofisher.com/immunoassays](http://thermofisher.com/immunoassays) to find:

- Our helpful immunoassay selection guide that allows you to search for assays based on your target protein
- Detailed information on all of our antibody pair kits, ELISA kits, and ProQuantum high-sensitivity and multiplex assay kits
- Important data demonstrating our assay specificity and sensitivity

**Table 3. List of components for different immunoassay kits.**

Immunoassay components		Type of immunoassay			
Immunoassay components	Antibody pair ELISA kits	Coated ELISA kits	Instant ELISA kits	ProQuantum HS kits	ProcartaPlex assays (all platforms)
96-well plate	Optional	•	•	NA	Flat bottom
Pretitrated capture antibody	•	Precoated	Precoated	•	Precoated capture bead
Pretitrated detection antibody	•	•	•	•	•
Recombinant protein standard	•	•	Additional well strips included	•	•
Stop solution	Not included	•	•	NA	NA
Substrate solution	•	•	•	NA	SA-PE
Assay buffer	•	•	Sample diluent	•	•
Wash buffer	Not included	•	•	NA	•
Coating buffer	•	NA	NA	NA	NA

Note: Our immunoassays are available in various kit sizes. Kits are calibrated to National Institute for Biological Standards and Control (NIBSC) or World Health Organization (WHO) standards (if available). SA = streptavidin, PE = phycoerythrin, NA = not applicable.

Our ELISA kits are developed to meet specifications typically expected by customers, including standard calibration, precision, sensitivity, specificity, recovery, lot-to-lot consistency, linearity, and parallelism (Table 4).

**Table 4. Rigorous assay verification of ELISA kits helps ensure consistent, reliable results.**

Specification	Description	What does it mean for you?
Standard calibration	Calibrated to NIBSC, if available	Allows accurate quantitation and consistent standard of reference across multiple platforms
Precision	Average inter-assay CV <10%; avg. intra-assay CV <10%	Consistent results
Sensitivity	Relevant levels of protein are detected for specific assay type	Enables detection of low levels of protein
Specificity	Cross-reactivity tests are performed with similar analytes	Helps to ensure accurate measurement of the protein of interest
Recovery	Buffers are optimized to minimize matrix effects	Helps to ensure accurate quantitation of samples within a complex matrix, including serum and plasma
Lot-to-lot consistency	In-house controls are tested to measure within set ranges	Helps to ensure consistent results with new lots
Linearity of dilution	Linear results over the quantitative range of the assay	Serial dilution of samples are quantitated accurately
Parallelism	Recombinant protein standards mimic native proteins	Samples can be measured with confidence

# Single-analyte quantitation: ELISA kits



## Precoated

A complete, validated ELISA solution

### Quantitate with confidence

Coated ELISA kits for the quantitation of individual analytes from a variety of sample types provide lower inter- and intra-assay variability. Developed and manufactured for labs that require verified and comprehensively tested kits, coated ELISA kits offer lot-to-lot consistency and help ensure the highest possible ELISA performance (see an example standard curve in Figure 2). Ready-to-use reagents, including precoated plates, help ensure consistent data throughout your research.

### Benefits of precoated ELISA kits

- **Robust**—low inter- and intra-assay coefficient of variation (CV)
- **Easy to use**—includes all required assay buffers and reagents, and a straightforward protocol
- **Highly verified**—optimized for serum, plasma, and cell culture supernatants

Request bulk packaging or lot reservation, or go custom at [thermofisher.com/IASpecialServices](http://thermofisher.com/IASpecialServices)

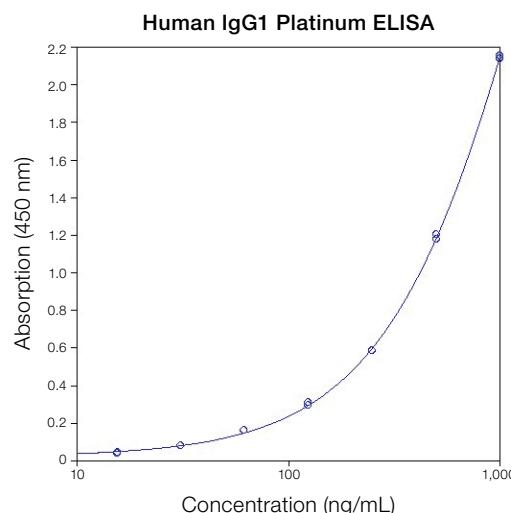


Figure 2. Standard curve for human IgG1-coated ELISA (Cat. No. BMS2092).

### ELISA kits for protein analysis

Watch our videos “Using Invitrogen precoated ELISA kits” and “How to coat a plate with uncoated Invitrogen ELISA kits” to find out all about running an ELISA to measure target proteins in serum, plasma, supernatants, cell lysates, and other sample types.

Watch ELISA videos at [thermofisher.com/elisahowtovideos](http://thermofisher.com/elisahowtovideos)

# ELISA kits (continued)



## Precoated

### Instant ELISA: the one-wash ELISA kit

#### Reduce steps and hands-on time by 60%

The one-wash Instant ELISA kit requires fewer handling steps than the conventional ELISA kit (Table 5). The Instant ELISA kit contains all of the necessary components, including capture antibody and lyophilized detection antibody, streptavidin-HRP, and sample diluent.

Additionally, the strip wells containing the standards for the standard curve are provided separately; they are ready to use, helping save both time and wells. Less hands-on time increases productivity, which leaves more time for your research.

**Table 5. Steps for conventional ELISA vs. Instant ELISA kits.**

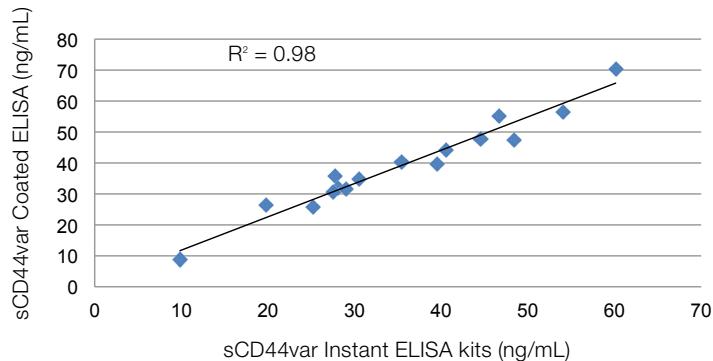
17 steps for conventional ELISA	7 steps for Instant ELISA kits
1 Washing of coated plate	
2 Reconstitution of standard protein	
3 Addition of sample diluent to standard wells	
4 Titration of standard curve	1 Rehydration of plate
5 Addition of sample diluent	2 Sample addition
6 Sample addition	3 Incubation
7 Dilution of biotin conjugate	
8 Addition of biotin conjugate	
9 Incubation	
10 Preparation of streptavidin-HRP conjugate	
11 Washing step	
12 Addition of streptavidin-HRP conjugate	
13 Incubation	
14 Washing step	4 Washing step
15 Addition of TMB substrate	5 Addition of TMB substrate
16 Addition of stop solution	6 Addition of stop solution
17 Calculation of results	7 Calculation of results

#### Benefits of Instant ELISA kits

- **Time saving**—only requires 15 min for setup
- **Maximum accuracy**—no need to add antibody or perform serial dilution of standards; reduced handling means less error and more consistent results
- **Better value**—generate standard curve data in parallel with additional well strips provided, to enable use of all 96 wells for your samples

#### Switching to Instant ELISA kits

The Instant ELISA kits utilize the same antibody pairs for many analytes across all assay formats. This enables cross-platform performance and comparable data using any of our Instant ELISA kits, ELISA, and ProcartaPlex multiplex assays. For example, if you are currently using an Invitrogen™ sCD44var Coated ELISA, you can be confident in switching to the Invitrogen™ sCD44var Instant ELISA assay, knowing that the data generated across the two kits will remain consistent (Figure 3).



**Figure 3. Performance comparison of human sCD44var Instant ELISA to coated ELISA.** Human sCD44var Instant ELISA kit (Cat. No. **BMS220INST**) was tested against a human sCD44var Coated ELISA kit (Cat. No. **BMS220**). Sixteen serum samples were applied with the coefficient of determination ( $R^2$ ) of 0.98, demonstrating comparable performance of the Instant ELISA kits against coated ELISA kits.

Find out more about Instant ELISA kits at [thermofisher.com/elisainstantkits](http://thermofisher.com/elisainstantkits)

# Antibody pair kits



Coat it yourself

Optimized reagents—all in one box

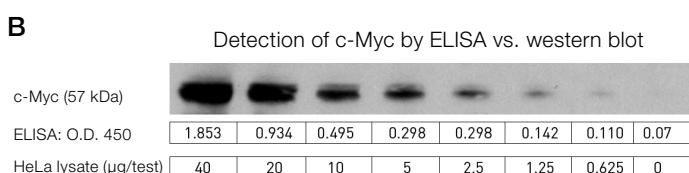
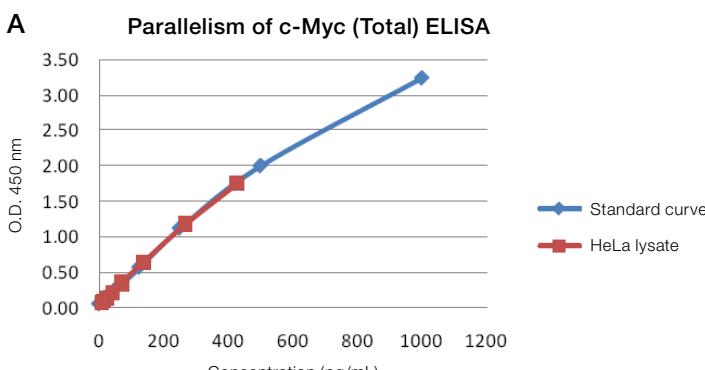
## Phosphospecific ELISA kits

### Cell signaling assay

For studies of intracellular proteins involved in signaling, Invitrogen™ phosphospecific ELISA kits are available for measurement of total, and phosphorylated, modified, or cleavage site–specific proteins. Advantages and benefits of these kits include:

- **Specificity**—two antibodies directed against the analyte provide better specificity than western blotting
- **Sensitivity**—more sensitive than western blotting
- **Quantitation**—get quantitative data in contrast to western blots (Figure 4)
- **Medium throughput**—96-well format, results in 4 hours, no densitometry analysis needed

Find out more about our phosphospecific ELISA kits at [thermofisher.com/phosphoelisas](http://thermofisher.com/phosphoelisas)



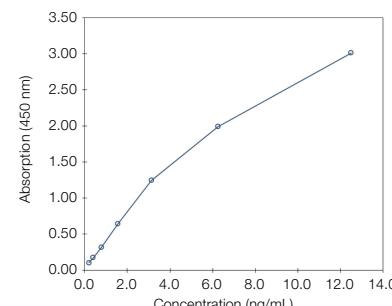
**Figure 4. Confirmation of western blotting data with quantitative results by phosphospecific ELISA assay.** (A) Quantitative sample parallelism data obtained using the Invitrogen™ c-Myc (Total) Human Phospho-ELISA Kit (Cat. No. KHO2041). (B) Western blotting results using an Invitrogen™ NuPAGE™ gel (Cat. No. NP0321). Assays were performed in parallel.

### Keep costs low

Uncoated ELISA kits are ideal for experienced ELISA users on a budget, who have less stringent requirements for inter- and intra-assay variance (Figure 5). Affordable ELISA kits using coat-it-yourself plates also include the necessary reagents to prepare and run an ELISA, including ELISA-optimized matched antibody pairs, standards, detection reagents, wash buffers, and coating buffers (plates are optional).

### Benefits of antibody pair kits

- **Flexible**—purchase based on the volume of your assay through a choice of package sizes, including 2-, 10-, and 20-plate kits
- **Complete and easy to use**—includes optimized antibody pairs and recombinant standards, TMB substrate, and all essential reagents and buffers—unlike ELISA kits from other suppliers
- **Affordable**—priced to accommodate the most demanding budgets and to help maximize your research



**Figure 5. Representative standard curve for Invitrogen™ Mouse TGFbeta1 Antibody Pair Kit (Cat. No. 88-50690).**

### Using antibody pairs to make an ELISA

Watch our video at [thermofisher.com/immunoassayvideos](http://thermofisher.com/immunoassayvideos), then visit [thermofisher.com/antibodypairs](http://thermofisher.com/antibodypairs) to discover what prematched antibody pairs we offer to help make ELISA analysis easier.

Find out more about uncoated ELISA kits at [thermofisher.com/uncoatedelisa](http://thermofisher.com/uncoatedelisa)

# Accessory reagents and equipment

Thermo Fisher Scientific offers a comprehensive line of accessory reagents and equipment to support your immunoassay needs. Reagents include:

- Primary antibodies
- Secondary antibody conjugates
- Coated microplates
- Blocking buffers
- Diluents
- Substrates

See a complete listing of accessory reagents for ELISA at [thermofisher.com/elisaaccessories](http://thermofisher.com/elisaaccessories)

Accessory equipment includes:

- Thermo Scientific™ Multidrop™ reagent dispensers
- Centrifuges
- Cold storage
- Single-channel pipettes
- Multichannel pipettes
- Pipette tips
- Plate washers
- Plate readers and analysis software

Get a comprehensive overview of immunoassay equipment offerings at [thermofisher.com/elisainstrumentsandequipment](http://thermofisher.com/elisainstrumentsandequipment)

## Microplate washers

### Wellwash Microplate Washer

Wash 96-well plates securely with the Thermo Scientific™ Wellwash™ Microplate Washer, an easy-to-use, reliable microplate-strip washer for routine ELISA applications. The Wellwash system features a graphical user interface, local language versions, and USB port for optimal ease of use and convenience.



### Wellwash Versa

### Microplate Washer

Wash 96- or 384-well plates securely with the Thermo Scientific™ Wellwash™ Versa Microplate Washer, an easy-to-use microplate-strip washer for routine ELISA applications. Designed for high performance and versatility, enjoy the ease of use and convenience provided through a graphical interface, local language version, and USB port.



See more at [thermofisher.com/wellwash](http://thermofisher.com/wellwash)

Considerations	Wellwash washer	Wellwash Versa washer
Languages	9	9
Plate types	96-well	96- and 384-well
Wash heads (depending on model)	1 x 8 or 1 x 12	Two 1 x 8 or two 1 x 12
Optional wash heads	1 x 12 or 1 x 8	Optional two 1 x 12 or two 1 x 8 Optional 1 x 16 (for 384-well plate) Optional 2 x 8 (for 96-well plate)
Wash bottles	One 2 L	Two 2 L
Rinse bottle	No	One 2 L
Waste bottle	One 2 L	One 4 L
USB port for protocol import and export	Yes	Yes
Aerosol cover	Yes	Yes
Robot compatibility	No	Yes
IQ/QQ/PQ	Yes	Yes

## Microplate readers

### Help reduce complexity and save time

Thermo Scientific™ Multiskan™ Sky Microplate Spectrophotometer is a next-generation UV/Vis microplate reader designed to be exceptionally convenient and easy to use for virtually any photometric research application, especially protein analysis.



- Ready-to-use built-in protocols allow fast and accurate quantitation of nucleic acids and proteins using the Thermo Scientific™ μDrop™ Plate, microplates, or cuvettes
- Attractive user interface is optimized for touchscreen use, allowing quick setup of endpoint, kinetic, or spectral assays
- Cloud-based tools such as Connect allow you to securely store, access, share, and manage your photometric data remotely
- Proven optical design enables top performance for a wide range of volumes and sample formats

Find out more about our microplate readers at [thermofisher.com/platereaders](http://thermofisher.com/platereaders)

Designed for bioscience researchers with a wide variety of needs, the

Thermo Scientific™ Varioskan™ LUX multimode microplate reader provides a flexible range of measurement modes. The instrument simplifies measurement setup with automatic dynamic range selection; its smart safety controls ease your workflow to help you avoid experimental errors. The Varioskan LUX multimode reader raises the bar for reliability and ease. The Varioskan LUX reader offers you:



- Versatility to run assays for photometric and fluorometric quantitation of proteins and RNA
- Five measurement modes: endpoint, kinetic, spectral, multipoint, and kinetic spectra
- Spectral scanning for assay optimization
- Modular, upgradable system for customization

Thermo Scientific™ SkanIt™ Software provides unlimited licenses with instrument purchase and ready-made sessions, available for running assays immediately.

It is the same intuitive software that drives all Thermo Scientific™ microplate readers. Find out more at [thermofisher.com/skanit](http://thermofisher.com/skanit).

Considerations	Multiskan Sky spectrophotometer	Varioskan LUX reader
Wavelength range (nm)	200–1,000	Fluorescence excitation and absorbance: 200–1,000 nm Fluorescence emission: 370–840 nm Luminescence: 360–670 nm TRF excitation: fixed to 334 nm (spectral scanning 200–840 nm) TRF emission: 400–700 nm (spectral scanning 270–840 nm) AlphaScreen excitation: fixed to 680 nm AlphaScreen emission: 400–660 nm
Wavelength selection	Monochromator	Monochromator Filters for luminescence, TRF, and AlphaScreen tools
Wavelength scanning	Yes	Yes
Plate format	6- to 384-well	6- to 1,536-well (fluorometry, TRF, luminometry, AlphaScreen tool) 6- to 384-well (absorbance)
Incubation	Yes	Yes
Shaking	Yes	Yes
Dispensers	No	One or two (optional)
Top or bottom reading	NA	Top or bottom (optional)
Cuvettes	Option	No
μDrop Plates	Yes	Yes
Gas control module	No	Yes (optional)
Onboard software	Yes	No
PC software	SkanIt Software (unlimited licenses)	SkanIt Software (unlimited licenses)
Robot compatibility	Yes	Yes
Applications	Immunoassays, including ELISA; protein assays (direct quantitation and colorimetric assays); nucleic acids (DNA, RNA) quantitation; cell proliferation, viability, and cytotoxicity assays; enzymatic activity assays; spectral and kinetic assays; endotoxin assays; bacterial growth assays	Immunoassays, including ELISA; protein assays (Invitrogen™ Quant-iT™ assay, direct quantitation, and colorimetric assays); nucleic acids (DNA, RNA), quantitation (Quant-iT and direct assays); cell proliferation, viability, and cytotoxicity assays; enzymatic activity assays; luciferase assays; calcium assays, FRET, BRET, TR-FRET, AlphaScreen™ and AlphaLISA™ assays; spectral and kinetic assays; live-cell assays with integrated gas control module; QuantiGene Singleplex assay

# ProQuantum high-sensitivity immunoassay kits



New technology

The ProQuantum high-sensitivity immunoassay is a platform innovation that provides researchers with an easy-to-run, high-performance assay with no proprietary instrument to purchase. By utilizing proximity-based amplification technology, we have combined the analyte specificity of high-affinity antibody–antigen binding with the signal detection capabilities of real-time PCR, to achieve a highly sensitive protein quantitation assay with a large dynamic range. With its ability to detect even lower levels of protein than traditional methods with very small sample consumption, you can get the most out of your precious or limited samples.

## Here's how it works

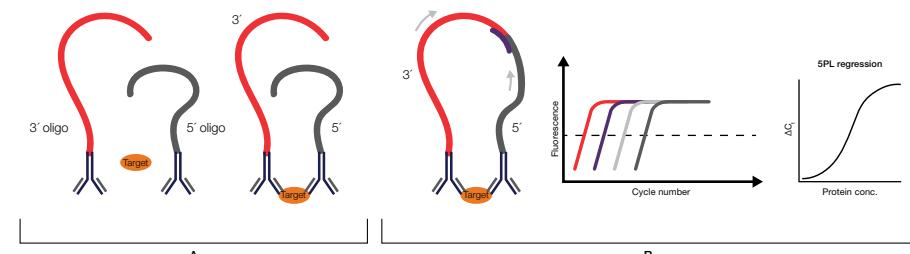
The ProQuantum immunoassays utilize a matched pair of target-specific antibodies each conjugated to a DNA oligonucleotide. During antibody–analyte binding, the two DNA oligos are brought into close proximity, which then allows for ligation of the two strands and subsequent creation of a template strand for amplification. This proximity-based technology leverages the sensitivity and large dynamic range of Applied Biosystems™ TaqMan® real-time PCR technology (Figure 6).

Find out more and select your assay at [thermofisher.com/proquantum](http://thermofisher.com/proquantum)

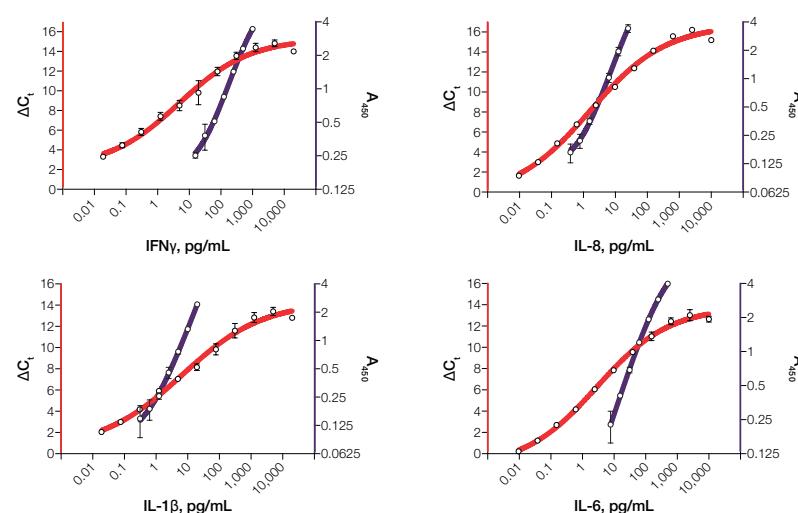
Sign up to get our new target release notices:  
[thermofisher.com/pqrleasenotice](http://thermofisher.com/pqrleasenotice)

The benefits of ProQuantum immunoassays include:

- **High-sensitivity**—detect low levels of proteins with greater sensitivity than traditional methods
- **Broad dynamic range**— $\geq 5$  logarithmic units, minimizing sample dilutions to help ensure they fall within the range (Figure 7)
- **Small sample consumption**—use 2–5  $\mu\text{L}$  of sample (for example, 2  $\mu\text{L}$  vs. 75  $\mu\text{L}$  for triplicate wells with other methods)
- **Fast, easy workflow**—2 hr from sample to answer, no wash steps, and a single 1 hr incubation
- **No proprietary instrument to purchase**—runs on any real-time PCR instrument
- **Includes intuitive analysis software**—comprehensive data analysis and statistical groupwise comparison



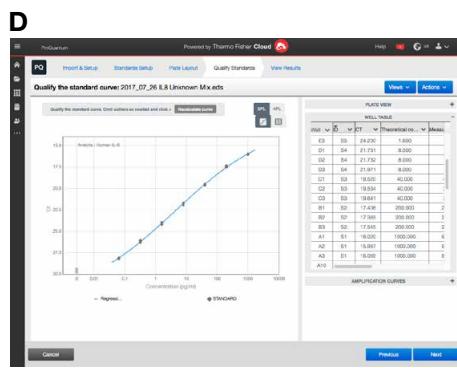
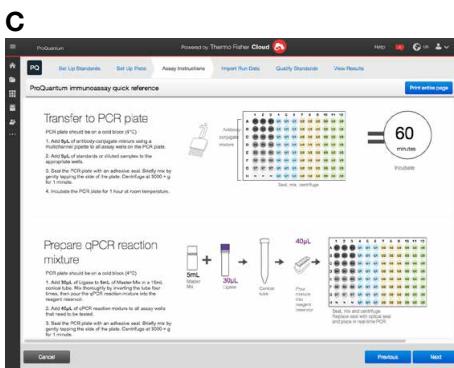
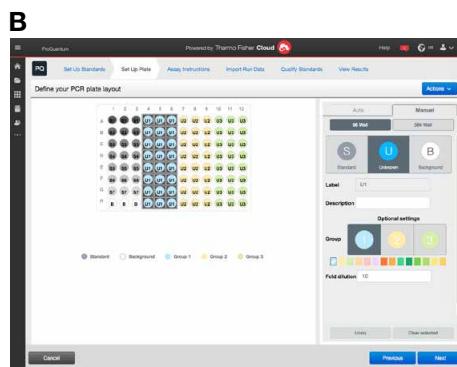
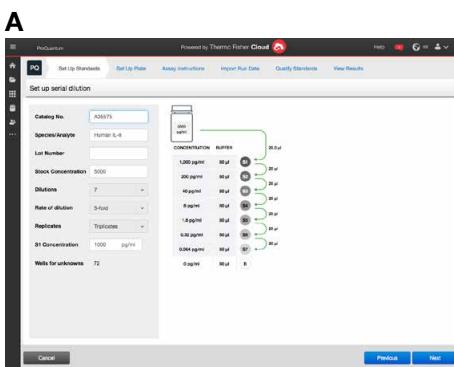
**Figure 6.** How ProQuantum immunoassay works. (A) Antibody-conjugates binding to target (1 hr incubation). (B) Ligation and amplification of signal (in qPCR instrument).



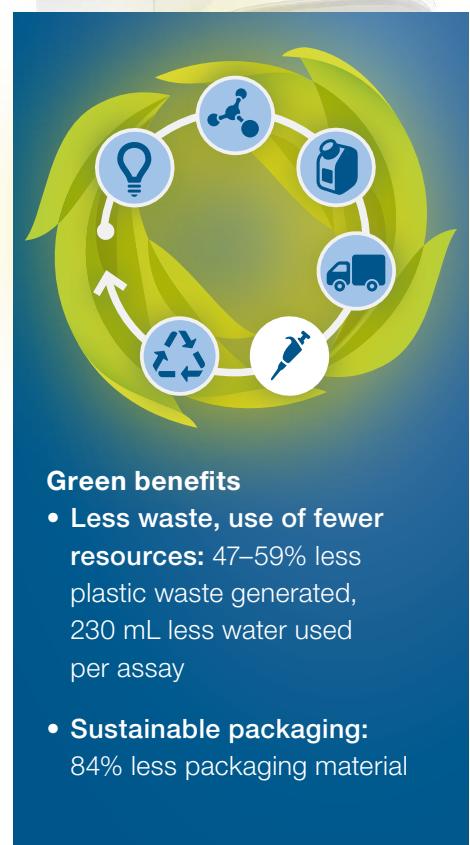
**Figure 7. Superior dynamic range.** Standard curves for Invitrogen™ ProQuantum™ High-Sensitivity Human IFN $\gamma$ , IL-1 $\beta$ , IL-8, and IL-6 immunoassay kits (red) show larger dynamic range and improved separation at the low end of the curve for greater sensitivity than normal and ultrasensitive ELISAs (purple).

## Data analysis using ProQuantum software

The intuitive Invitrogen™ ProQuantum™ cloud-based or desktop software is available to support your data analysis. This step-by-step software helps you set up your assay, including standard curve dilution calculation, plate layout for 96 or 384 wells, and customized lab bench instructions (cloud-enabled version only) (Figure 8). Once the assay has been performed, simply upload your run files from the qPCR instrument (see qPCR options on page 37) to the ProQuantum software and analyze. Analysis features include standard curve qualification, outlier detection, 4 or 5PL regression fit, results for unknown samples in pg/mL, and groupwise statistics. Easily access and securely share results with colleagues anywhere, anytime with our cloud-based Connect platform. Access free ProQuantum cloud-enabled software at [apps.thermofisher.com/apps/proquantum](http://apps.thermofisher.com/apps/proquantum). Desktop version is now available (Cat. No. A43594).



**Figure 8. Assay setup and analysis using ProQuantum software.** (A) Standard curve setup. (B) Plate setup. (C) Customized lab instructions. (D) Data and results.



## Need a custom ProQuantum assay? Lot reservation? Special bulk packaging?

We provide custom target development services of your chosen protein targets and immunoassay platform, as well as lot reservations and custom packaging for bulk orders.

Find out more at [thermofisher.com/iaspecialrequests](http://thermofisher.com/iaspecialrequests)

# Multianalyte quantitation: assays and platforms

## Protein multiplex immunoassays

- Quantitate up to 65 analytes in only 25 µL of serum or plasma, or 50 µL of cell culture supernatant

## Gene expression analysis

- Measure up to 80 RNA transcripts in a single well

## Luminex instruments

### Platforms that fit your multiplex research needs

The Luminex xMAP technology combines advanced fluidics, optics, and digital signal processing with fluorescently dyed microspheres to enable the quantitation of multiple nucleic acid or protein targets from a single sample. The QuantiGene Plex assays are available for nucleic acid quantitation, and ProcartaPlex multiplex immunoassays for measurement of protein expression.

### High-throughput immunoassays and gene expression analysis—all from one supplier, on one instrument

As a partner of Luminex, Thermo Fisher Scientific has been providing Luminex platform users with a comprehensive offering of multiplex reagents for over 18 years. Luminex Corporation has been supplying instruments to the life science research market for almost 20 years, with over 14,000 units installed worldwide.

## ProcartaPlex multiplex immunoassays

ProcartaPlex multiplex immunoassays are bead-based assays for protein detection using the Luminex xMAP technology. ProcartaPlex assays are based on the principles of a sandwich ELISA, using two highly specific

antibodies binding to different epitopes of one protein. Invitrogen™ ProcartaPlex™ Simplex kits can be easily combined to create your own panels, or we can mix and validate a panel for you.

## QuantiGene Plex assays for RNA and DNA quantitation

The QuantiGene Plex assay is a higher-throughput solution for multiplex analyses of gene expression, allowing researchers to measure up to 80 genes in a single well. This assay is fast, easy, and PCR-free—no RNA purification is needed. Additionally, custom-made panels can be designed, validated, and shipped typically within two to three weeks of a request.

## Why use Luminex technology?

### Profile more biomarkers with less starting sample:

Quantitate up to 80 analytes simultaneously with the FLEXMAP 3D or Luminex 200 instrument, and up to 50 analytes with the MAGPIX instrument. All of our ProcartaPlex assays are compatible with as little as 25 µL of plasma or serum, or 50 µL of cell culture supernatant.

**High-throughput analysis:** QuantiGene Plex and ProcartaPlex assays are available in 96-well and 384-well formats for high-throughput analysis.

**Proven technology on a trusted platform:** Hundreds of peer-reviewed publications have cited ProcartaPlex and QuantiGene Plex assays, demonstrating their value to researchers.

## Comparison of different multiplex assay platforms

Assays	Analyte measured	Plex level	Targets available	Custom designs
ProcartaPlex multiplex immunoassays	Proteins	65	>500	Yes
QuantiGene Plex RNA assays	RNA	80	>17,000	Yes

# Luminex xMAP technology

## Quick, cost-effective, and accurate multianalyte profiling system

The open-architecture of Luminex xMAP technology uses flow cytometry, microspheres, lasers, digital signal processing, and traditional chemistry—combining proven technologies in a unique way.

### Advantages

- Helps reduce costs and labor through multiplexing
- Smaller sample size requirements compared to single-result assays
- Enables fast, reproducible results from favorable kinetics of liquid bead array approach
- Broad coverage of applications, including protein expression and gene expression profiling

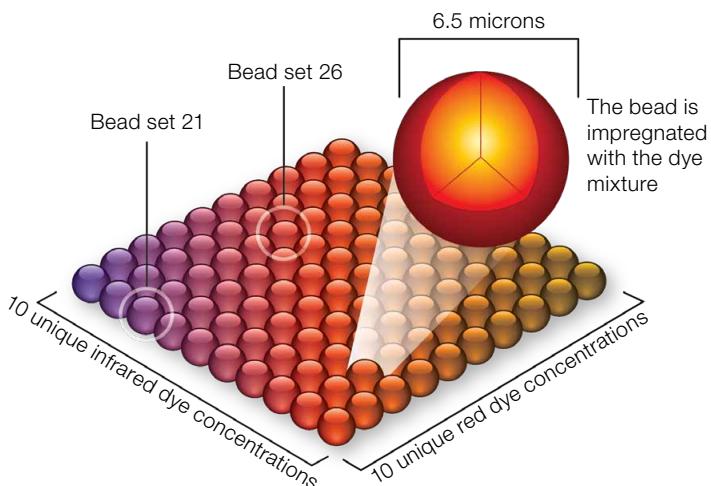
### How Luminex xMAP technology works

Sets of magnetic microspheres are color-coded with combinations of red and infrared fluorophores. Each bead set is coated with a reagent specific to a particular bioassay, allowing the capture and detection of several specific analytes from a single sample. Lasers in the compact analyzer excite the internal dyes that identify each microsphere as well as any reporter dye captured, providing quantitation of individual analytes on each microsphere. The analyzer reads many beads from each set, enabling rapid and precise results for several targets within a single sample.

Find out which instrument is best for you and request a quote at [thermofisher.com/luminexinstruments](http://thermofisher.com/luminexinstruments)

## Luminex xMAP technology

ProcartaPlex assays have adopted the Luminex xMAP magnetic bead technology that uses Luminex® MagPlex® superparamagnetic 6.5-micron microsphere beads with a magnetic core. The beads are internally dyed with precise proportions of red and infrared fluorophores. Varying proportions of the red and infrared fluorophores result in 100 spectrally unique microspheres, which are identified by the Luminex xMAP detection systems. The conjugation of a distinct monoclonal antibody to a distinct bead allows for analysis of multiple analytes in a single well.



## Luminex instrumentation

Luminex instrumentation consists of three instrument models: MAGPIX, Luminex 100/200, and FLEXMAP 3D systems. These instruments are based on either the principles of quantitative fluorescence microscopy or fluorescence flow cytometry.

## Accessories for Luminex technology

Description	Cat. No.
xMAP Sheath Fluid (1X), 20 L	4050015
xMAP Sheath Fluid Concentrate (20X), 1 L	4050018
xMAP Classification Calibrator Microspheres (CAL1)*	L100CAL1
xMAP Reporter Calibrator Microspheres (CAL2)*	L100CAL2
xMAP Classification Control Microspheres (CON1)*	L100CON1
xMAP Reporter Control Microspheres (CON2)*	L100CON2
MAGPIX Performance Verification Kit (25 reactions)	MPXPVERK25
MAGPIX Calibration Kit (25 reactions)	MPXCALK25
MAGPIX Drive Fluid (4-pack)	MPXDF4PK
Luminex 200 Performance Verification Kit	LX2RPVERK25
Luminex 200 Calibration Kit	LX2RCALK25
FLEXMAP 3D Performance Verification Kit (25 reactions)	F3DPVERK25
FLEXMAP 3D Calibration Kit (25 reactions)	F3DCALK25
Hand-Held Magnetic Plate Washer	EPX-55555-000

\* 5 mL.



Affordable, efficient,  
and compact in size



Versatile and the  
standard in multiplexing



High-throughput,  
high-plex

Feature	MAGPIX	Luminex 100/200	FLEXMAP 3D
Optics	LED/CCD camera	Lasers/APDs/PMTs	Lasers/APDs/PMTs
Hardware	Fluorescence imager	Flow cytometry-based	Flow cytometry-based
Multiplex capacity	50	100	500
Read time	~60 min/96-well plate	~30 min/96-well plate	~75 min/384-well plate
Applications	Protein/nucleic acid	Protein/nucleic acid	Protein/nucleic acid
Dynamic range	3.5 logarithmic units	3.5 logarithmic units	4.5 logarithmic units
Microplate	96-well	96-well	96-well and 384-well
Footprint including PC (Linear bench space)	64.8 cm (24 in.)	80.0 cm (32 in.)	64.8 cm (24 in.)
Cat. No.	APX1042	APX10031	APX1342

Place a request for a quote from your local sales representative and find out more at [thermofisher.com/luminexinstruments](http://thermofisher.com/luminexinstruments)

# ProcartaPlex multiplex immunoassay kits



## Profile more biomarkers with less sample

ProcartaPlex multiplex immunoassays use the Luminex xMAP (multianalyte profiling) technology that enables the simultaneous detection and quantitation of up to 65 protein targets in a single 25–50 µL sample—from plasma, serum, cell culture supernatants, and other bodily fluids. The technology employs the use of differentially dyed, capture beads for each target in a multiplex “ELISA-like” assay. ProcartaPlex immunoassays can profile up to 65 times more analytes using significantly less sample in the same time that it takes to perform a traditional sandwich ELISA.

ProcartaPlex multiplex immunoassays provide the ability to create your unique panel and enable reproducible results throughout the course of your study.

- More than 90% of ProcartaPlex assays can be combined with one another
- All ProcartaPlex assays are individually tested for specificity and endogenous, native protein detection
- Multianalyte detection with a large dynamic range
- Scalable and reproducible performance regardless of plex size
- Largest multiplex panel on the market for quantitation of up to 65 analytes

ProcartaPlex multiplex immunoassays are available in multiple formats across six species (human, mouse, rat, nonhuman primate, porcine, and canine) to meet the needs of your research.

Get information regarding characteristic assay details and individual analytes at [thermofisher.com/procartaplex](http://thermofisher.com/procartaplex)

## ProcartaPlex multiplex assay options

Name	Description	Mixing required	Bead type	Base kit included
ProcartaPlex™ Preconfigured panels	Predefined, biologically relevant, and disease-defined panels using magnetic beads for the quantitative multiplex analysis of up to 65 analytes in a single sample. Optimal performance and reproducibility through extensive testing for combinability, cross-reactivity and interference.	No	Magnetic	Yes
ProcartaPlex™ Mix & Match panels	Custom-blended and optimized panels deliver results tailored to the panel design of your choice. Simply provide your desired species, sample type, and instrument for use. Then select your desired analytes, and we will build and optimize a custom assay kit according to your specifications.	No	Magnetic	Yes
ProcartaPlex™ Simplex sets	Bead sets for the detection of individual analytes designed to be added to ProcartaPlex panels for increased customization. Alternatively, multiple ProcartaPlex simplex bead sets can be combined and run using the Invitrogen™ ProcartaPlex™ Basic Kit, which includes all non-target-specific reagents needed to perform the assay.	Yes	Magnetic	No

Have technical questions? Need help getting started?

Email [luminexfas@thermofisher.com](mailto:luminexfas@thermofisher.com) to get a one-on-one technical consultation.

# Why ProcartaPlex assays?

## Flexibility

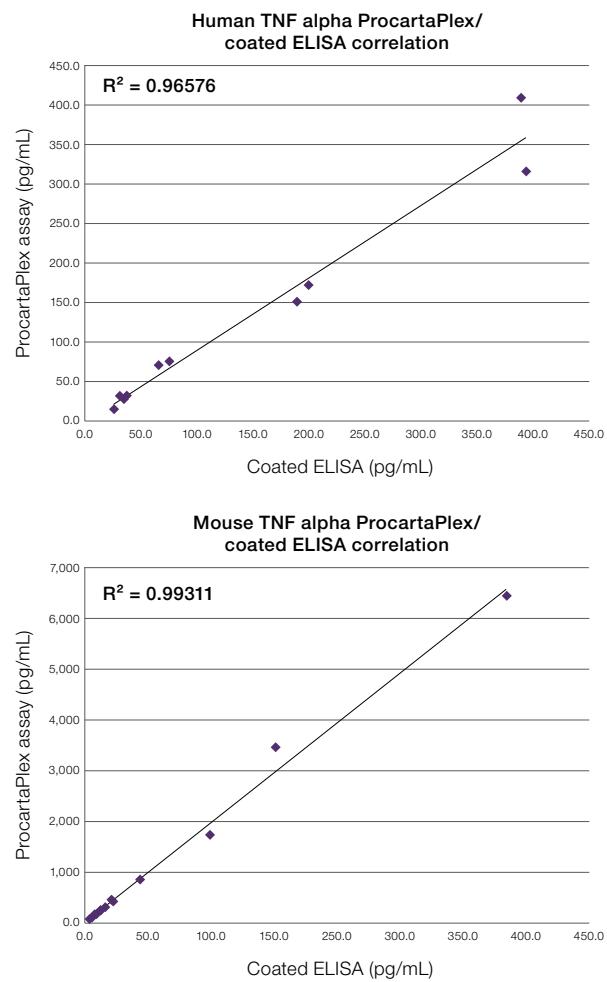
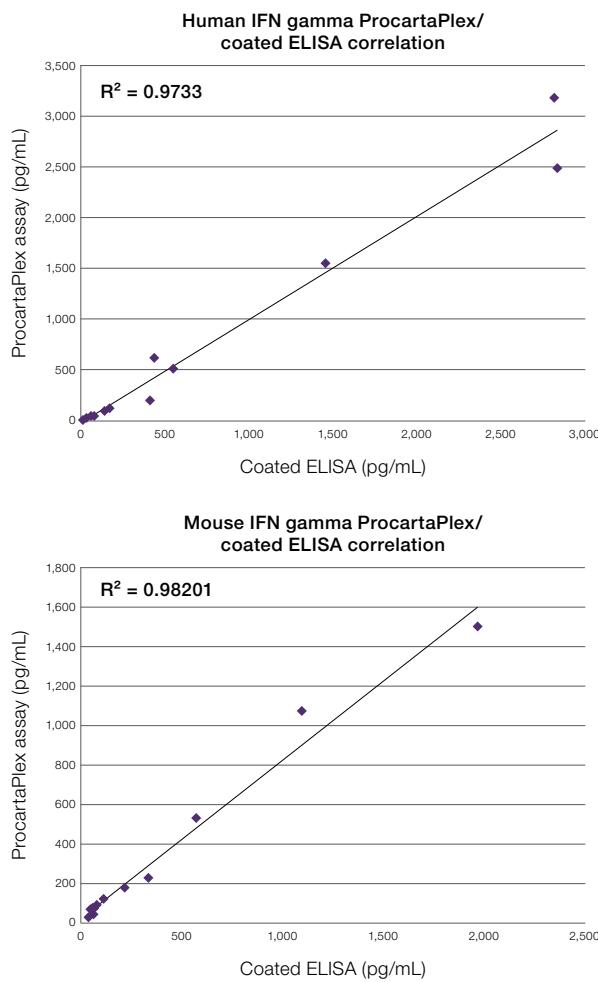
Get exactly the panel you want. Since more than 90% of ProcartaPlex assays can be combined with one another, ProcartaPlex assays allow the creation of highly specific as well as high-plex panels. We currently offer the largest published panel with a 65-plex assay [1–4].

## Reproducible results

ProcartaPlex assays are based on the principles of sandwich ELISA, where two highly specific antibodies recognize different epitopes on the same protein. Optimal performance and reproducibility are achieved through extensive multianalyte validation and optimization, enabling the delivery of consistent, reproducible, and high-quality assays.

## Correlation to ELISA

Switch easily from ProcartaPlex assays to ELISA and vice versa with reliable results. As shown in Figure 9, equivalent results ( $R^2 > 0.9$ ) were obtained using the ProcartaPlex multiplex immunoassays and traditional plate-based ELISAs for human and mouse IFN gamma. ProcartaPlex assays achieve quantitative results comparable to traditional ELISA results with the added benefits of reduced sample volume, shorter assay time, and lower cost.

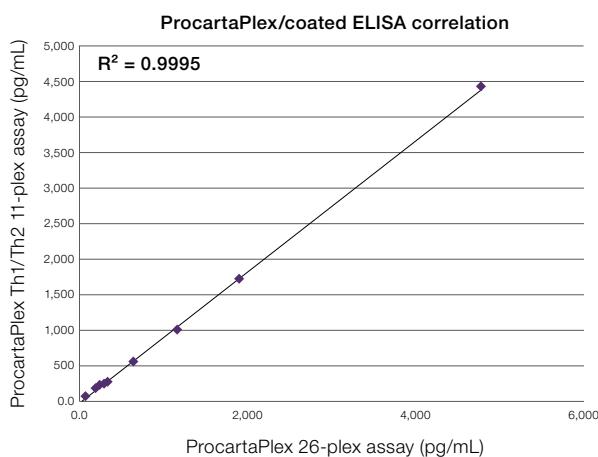


**Figure 9. Results of an experiment measuring IFN gamma and TNF alpha in stimulated human and mouse peripheral blood mononuclear cells (PBMCs).** Supernatants were serially diluted two-fold in normal human or mouse serum, to allow for differential cytokine levels in a serum matrix. Additional cytokines for human and mouse analytes were compared, including IL-1 beta and IL-17A, and similar performance was obtained (data not shown).

## Scalability

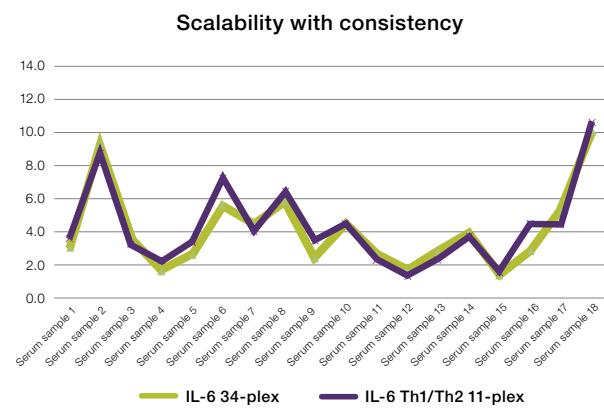
The ability to scale the number of analytes investigated in multiplex experiments is critical for the progression of many projects. For example, it is not uncommon to begin a research project by analyzing a large, comprehensive 35-plex cytokine panel on fewer samples (e.g., 100) to determine which analytes are affected by a particular disease or drug treatment. The resulting list of analytes can then be investigated further, for instance, using an 11-plex panel, on a larger set of samples. Thus, there is a great need for scalability in multiplex panel assays in order to

enable researchers to correlate all of their data across the different stages of their investigation. Many commercially available multiplex assays have not been developed with this level of consistency in mind. However, this specification is a key design requirement incorporated during the ProcartaPlex assay development. Data in Figures 10 and 11 illustrate the high correlation between similar analytes in a large and small panel and the scalability when using ProcartaPlex assays. Similar results are obtained when investigating other analytes.



**Figure 10. Data illustrates the high correlation between large- and small-scale multiplex scaling when using ProcartaPlex assays.**

Regression analysis comparing the Invitrogen™ ProcartaPlex™ Mouse Cytokine & Chemokine Panel 1 (26-plex) and the ProcartaPlex™ Mouse Th1/Th2 Cytokine Panel (11-plex) revealed an  $R^2$  value  $>0.9995$ .



**Figure 11. Scalability of ProcartaPlex multiplex immunoassays.**

Human serum samples were run in parallel using both the Invitrogen™ ProcartaPlex™ Human Cytokine & Chemokine Panel 1A (34-plex) and the Human Th1/Th2 Cytokine Panel (11-plex). Experiments demonstrate consistency achieved in both large- and small-scale multiplex panels.

# ProcartaPlex panels

## ProcartaPlex human panel for immune monitoring

Immune Monitoring 65-Plex Human ProcartaPlex Panel				
Cat. No. EPX650-10065-901				
Analyte (bead region)				
APRIL (88)	GM-CSF (44)	IL-7 (26)	IL-23 (63)	MIP-1 $\alpha$ (12)
BAFF (86)	Gro $\alpha$ (61)	IL-8 (27)	IL-27 (14)	MIP-1 $\beta$ (47)
BLC (29)	HGF (46)	IL-9 (52)	IL-31 (37)	MIP-3 $\alpha$ (56)
$\beta$ NGF (55)	IFN $\alpha$ (48)	IL-10 (28)	IP-10 (22)	MMP-1 (64)
CD30 (84)	IFN $\gamma$ (43)	IL-12p70 (34)	I-TAC (57)	SCF (39)
CD40L (74)	IL-1 $\alpha$ (62)	IL-13 (35)	LIF (15)	SDF-1 $\alpha$ (13)
ENA-78 (82)	IL-1 $\beta$ (18)	IL-15 (65)	MCP-1 (51)	TNF- $\alpha$ (45)
Eotaxin (33)	IL-2 (19)	IL-16 (70)	MCP-2 (8)	TNF- $\beta$ (54)
Eotaxin-2 (30)	IL-2R (9)	IL-17A (36)	MCP-3 (68)	TNF-R2 (85)
Eotaxin-3 (49)	IL-3 (73)	IL-18 (66)	M-CSF (67)	TRAIL (58)
FGF-2 (75)	IL-4 (20)	IL-20 (81)	MDC (87)	TSLP (80)
Fractalkine (59)	IL-5 (21)	IL-21 (72)	MIF (53)	TWEAK (97)
G-CSF (42)	IL-6 (25)	IL-22 (76)	MIG (69)	VEGF-A (78)

A version of the Invitrogen™

Immune Monitoring

ProcartaPlex™ Panel for

MAGPIX system users  
is available.

Cat. No. **EPX650-16500-901**

## ProcartaPlex human panels

Th1/Th2 Cytokine 11-Plex Human ProcartaPlex Human Panel				A
Cat. No. EPX110-10810-901				
GM-CSF	IL-2	IL-6	IL-18	
IFN-gamma	IL-4	IL-12 p70	TNF-alpha	
IL-1 beta	IL-5	IL-13		
Th9/Th17/Th22/Treg Cytokine 7-Plex Human ProcartaPlex Panel				B
Cat. No. EPX070-10817-901				
IL-9	IL-17A	IL-22	IL-27	
IL-10	IL-21	IL-23		
Cytokine 7-Plex Human ProcartaPlex Panel 1C				C
Cat. No. EPX070-10010-901				
IFN-alpha	IL-1RA	IL-15	TNF-beta (LTA)	
IL-1 alpha	IL-7	IL-31		
Chemokine 9-Plex Human ProcartaPlex Panel 1				D
Cat. No. EPX090-12187-901				
Eotaxin (CCL11)	MIP-1 alpha (CCL3)			
GRO-alpha (CXCL1)	MIP-1 beta (CCL4)			
IL-8 (CXCL8)	SDF-1 alpha (CXCL12)			
IP-10 (CXCL10)	RANTES (CCL5)			
MCP-1 (CCL2)				
Growth Factor 11-Plex Human ProcartaPlex Panel				E
Cat. No. EPX110-12170-901				
BDNF	HGF	SCF		
NGF-beta	LIF	VEGF-A		
EGF	PDGF-BB	VEGF-D		
FGF-2	PIGF			

## ProcartaPlex human panel combinations

Th9/Th17/Th22/Treg & Cytokine 14-Plex Human ProcartaPlex Panel 1C	B	C			
Cat. No. EPX140-12174-901					
Cytokine 1C & Chemokine 16-Plex Human ProcartaPlex Panel 1	C	D			
Cat. No. EPX160-12176-901					
Th9/Th17/Th22/Treg & Chemokine 16-Plex Human ProcartaPlex Panel 1	B	D			
Cat. No. EPX160-12175-901					
Th1/Th2 & Cytokine 18-Plex Human ProcartaPlex Panel 1C	A	C			
Cat. No. EPX180-12172-901					
Th1/Th2/Th9/Th17/Th22/Treg Cytokine 18-Plex Human ProcartaPlex Panel	A	B			
Cat. No. EPX180-12165-901					
Th1/Th2 & Chemokine 20-Plex Human ProcartaPlex Panel 1	A	D			
Cat. No. EPX200-12173-901					
Cytokine 25-Plex Human ProcartaPlex Panel 1B	A	B	C		
Cat. No. EPX250-12166-901					
Cytokine & Chemokine 34-Plex Human ProcartaPlex Panel 1A	A	B	C	D	
Cat. No. EPX340-12167-901					
Cytokine/Chemokine/Growth Factor 45-Plex Human ProcartaPlex Panel 1	A	B	C	D	E
Cat. No. EPX450-12171-901					

# Immuno-oncology

The human immune system has evolved to protect the integrity of multicellular organisms against external threats such as malignant cells, which are altered due to carcinogenesis. Many advanced anticancer therapies aim to engage the power of the immune system to combat cancer. The goal of cancer immunotherapy is to initiate a self-sustaining cycle of cancer immunity, overcome negative feedback mechanisms, and avoid immunosuppressive molecules.

T cells and natural killer (NK) cells are important players in fighting malignant cells, and soluble forms of receptors and ligands can be measured with Invitrogen™ Immuno-Oncology Checkpoint ProcartaPlex™ Panels.

## ProcartaPlex human panels for immuno-oncology

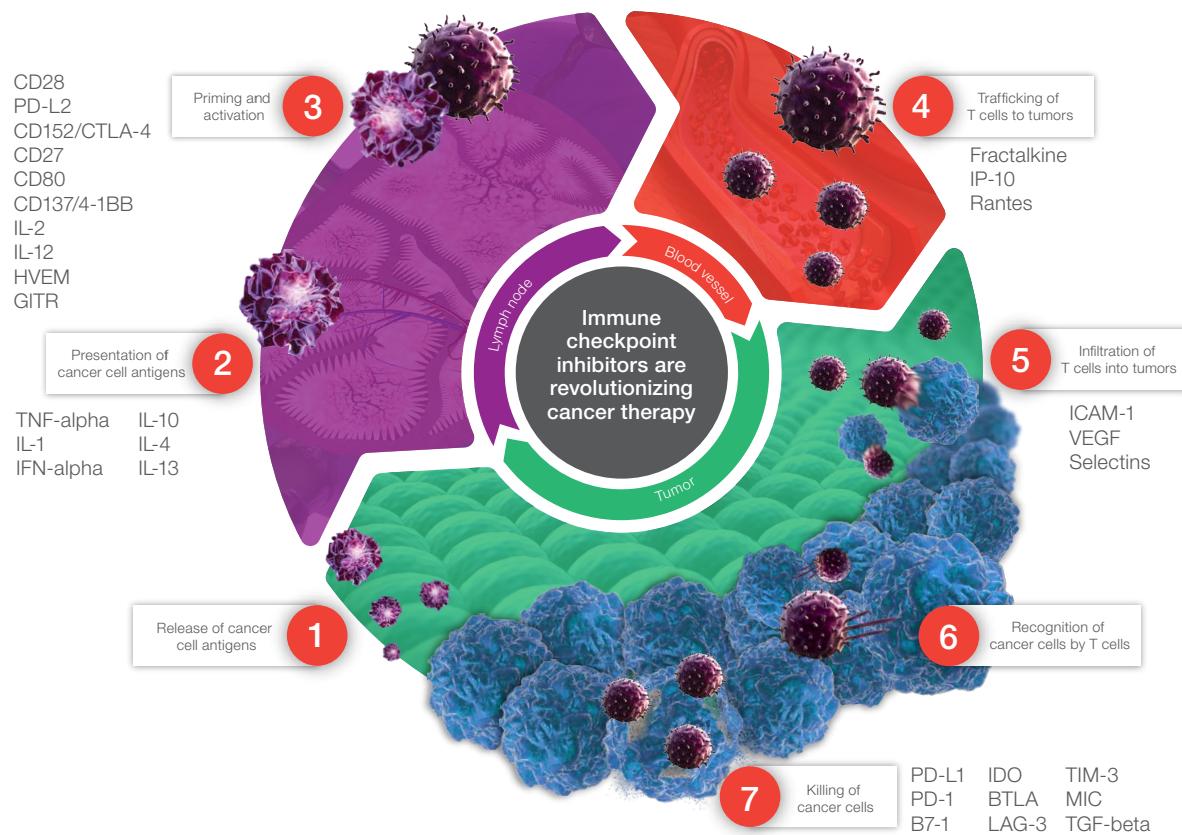
Immuno-Oncology Checkpoint 14-Plex Human ProcartaPlex Panel 1			
Cat. No. EPX14A-15803-901			
BTLA	LAG-3	TIM-3	CD27
GITR	PD1	CD28	CD152 (CTLA4)
HVEM	PD-L1	CD80	
IDO	PD-L2	4-1BB (CD137)	

Immuno-Oncology Checkpoint 14-Plex Human ProcartaPlex Panel 2			
Cat. No. EPX140-15815-901			
MICA	Perforin	ULBP-1	Arginase-1
MICB	PVR	ULBP-3	ULBP-4
Nectin-2	Siglec-7	Tactile	
NT5E	Siglec-9	E-Cadherin	

Immuno-Oncology Checkpoint 10-Plex Human ProcartaPlex Panel 3			
Cat. No. EPX100-15820-901			
ICOS Ligand (B7-H2)	CD276 (B7-H3)	VISTA (B7-H5)	B7-H6
CD47 (IAP)	CD48 (BLAST-1)	Galectin-9	TIMD-4
CD134 (OX40)	S100A8/A9		



For Invitrogen™ Immuno-Oncology Checkpoint Mouse panels, see page 26.

## ProcartaPlex panels for human cytokine/chemokine/growth factors

Essential Th1/Th2 Cytokine 6-Plex Human ProcartaPlex Panel			
Cat. No. EPX060-10009-901			
IFN-gamma	IL-5	IL-12 p70	
IL-4	IL-6	TNF-alpha	
Essential 4-Plex Human ProcartaPlex Panel 2			
Cat. No. EPX040-10008-901			
IL-10 beta	IL-8 (CXCL8)	IL-10	IL-17A (CTLA-8)
Inflammation 20-Plex Human ProcartaPlex Panel			
Cat. No. EPX200-12185-901			
E-selectin	IL-1 alpha	IL-10	MCP-1 (CCL2)
GM-CSF	IL-1 beta	IL-12p70	MIP-1 beta (CCL4)
ICAM-1	IL-4	IL-13	MIP-1 alpha (CCL3)
IFN-alpha	IL-6	IL-17A (CTLA-8)	P-selectin
IFN-gamma	IL-8 (CXCL8)	IP-10 (CXCL10)	TNF-alpha
Myokine 8-Plex Human ProcartaPlex Panel			
Cat. No. EPX080-12186-901			
BDNF	IL-6	IL-10	LIF
IL-1RA	IL-8 (CXCL8)	IL-15	TNF-alpha
Chemokine 9-Plex Human ProcartaPlex Panel 2			
Cat. No. EPX090-15840-901			
CCL1 (l-309)	MCP-4 (CCL13)	CCL17 (TARC)	MIP-3 beta (CCL19)
CCL25 (TECK)	MIP-2 alpha (CXCL2)	CCL21 (6Ckine/SLC)	CCL23 (MPIF)
CXCL6 (GCP-2)			

## ProcartaPlex human panel for antibody isotyping

Antibody Isotyping 7-Plex Human ProcartaPlex Panel*			
Cat. No. EPX070-10818-901			
IgG1	IgG2	IgG3	IgG4
IgA	IgE	IgM	

## ProcartaPlex human panels for metabolism/obesity

Metabolism/Obesity 5-Plex Human ProcartaPlex Panel 1*			
Cat. No. EPX050-15805-901			
RBP4	ICAM-1	NGAL	Adiponectin
ZAG			
Metabolism/Obesity 9-Plex Human ProcartaPlex Panel 2*			
Cat. No. EPX09A-15804-901			
C-peptide	Cortisol	FGF-23	GLP-1
Ghrelin	Insulin	PYY	Leptin
Resistin			
Apolipoprotein 5-Plex Human ProcartaPlex Panel			
Cat. No. EPX050-15818-901			
APO A1	APO B	APO E	
APO A2	APO C2		

## ProcartaPlex panels for human cardiac proteins

Cardiac Disease 9-Plex Human ProcartaPlex Panel			
Cat. No. EPX090-15809-901			
Big ET-1	FABP-3	LDH-B	NT proBNP
CKMB	GDF-15	Myoglobin	TNI
CTF-1			
Atherosclerosis 9-Plex Human ProcartaPlex Panel			
Cat. No. EPX090-15822-901			
FGF-2	IL-8	MPO	Tenascin-C
HSP60	LOX-1	PAI-1	TRAIL
	IL-6		
Atherosclerosis 4-Plex Human ProcartaPlex Panel 2			
Cat. No. EPX040-15824-901			
Adiponectin	CHI3L1/YKL-40	ICAM-1	Lp-PLA2
Cardiac Remodeling 8-Plex Human ProcartaPlex Panel			
Cat. No. EPX080-15819-901			
Gal-3	IL-33R	LAP	PTX3
IL-33	IP-10	OPN	TREM-1
Arteriosclerosis 5-Plex Human ProcartaPlex Panel			
Cat. No. EPX050-15821-901			
BMP-2	FGF-23	OPG	RANKL
COMP			

## ProcartaPlex human panel for graft versus host disease

Graft Versus Host Disease 8-Plex Human ProcartaPlex Panel			
Cat. No. EPX080-15814-901			
CD30	HGF	KRT18	Syndecan-1
Granzyme A	IL-2R (CD25)	ST2/IL33R	TNF-RI

\* Panel cannot be combined with other ProcartaPlex panels or Simplex kits.

## ProcartaPlex human panels for angiogenesis

Angiogenesis 18-Plex Human ProcartaPlex Panel			
Cat. No. EPX180-15806-901			
Angiopoietin-1	Follistatin	Leptin	TIE-2
BMP-9	G-CSF	LYVE-1	VEGF-A
EGF	HB-EGF	PDGF-BB	VEGF-D
EMMPRIN	HGF	PECAM-1	
FGF2	IL-8	Syndecan-1	

Angiogenesis 3-Plex Human ProcartaPlex Panel 2			
Cat. No. EPX030-15807-901			
Angiogenin	Angiostatin	Endostatin	

## ProcartaPlex human panel for abundant serum markers

Abundant Serum Markers 26-Plex Human ProcartaPlex Panel			
Cat. No. EPX260-15808-901			
Adiponectin	ICAM-1	NGAL	Resistin
CD14	L-selectin	NRP-1	SCGF-b
CD44	Lactoferrin	Osteopontin	TIMP-1
CD44var(var6)	Leptin	PAI-1	VCAM-1
Cystatin C	MBL	RANTES	ZAG
Elastin	MMP-3	RBP4	
Endoglin	MMP-9	REG3a	

## ProcartaPlex panels for human coagulation

Coagulation 6-Plex Human ProcartaPlex Panel 1*			
Cat. No. EPX060-10824-901			
Factor XI	Factor XII	Factor XIII	
Antithrombin	Prothrombin	CRP	
Coagulation 3-Plex Human ProcartaPlex Panel 2*			
Cat. No. EPX030-10823-901			
Factor V	Factor VII	Factor VIII	
Coagulation 4-Plex Human ProcartaPlex Panel 3*			
Cat. No. EPX040-10825-901			
Factor IX	Protein S	Protein C	vWF

## ProcartaPlex human panel for MMP

MMP 5-Plex Human ProcartaPlex Panel 1			
Cat. No. EPX050-10015-901			
MMP-1	MMP-8	MMP-12	MMP-13
MMP-7			

## ProcartaPlex human panel for apoptosis

Apoptotic Cell Clearance 12-Plex Human ProcartaPlex Panel			
Cat. No. EPX120-15816-901			
AXL	Gas6	Mer (MERTK)	RAGE
CALR (CRT)	LOX-1	PAI-1 (Serpine)	TYRO3
CD36	MBL	PECAM-1	uPAR

## ProcartaPlex human panels for TNFSF

TNF Superfamily 15-Plex Human ProcartaPlex Panel*			
Cat. No. EPX150-15801-901			
APRIL	EDA-1	NGF-beta	TRAIL
BAFF	FasL	RANKL	Tweak
CD30L	GITRL	TNF-alpha	4-1BB (CD137)
CD40L	LIGHT	TNF-beta	

TNF Receptor Superfamily 12-Plex Human ProcartaPlex Panel*			
Cat. No. EPX120-15802-901			
CD30	DR6	TNF-R1	TRAIL-R1
CD40	Fas (APO)	TNF-R2	TRAIL-R2
GITR	HVEM	4-1BB (CD137)	CD27

## ProcartaPlex Panels for neurobiology

Neuroscience 18-Plex Human ProcartaPlex Panel			
Cat. No. EPX180-15837-901			
Tau (Total)	Tau (Phospho) [T181]	Aβ 1-42	Neurogranin
YKL40/CHI3L1	NF-H	KLK6	NCAM
FGF-21	TDP-43	GFAP	UCHL
S100b	GDNF	CNTF	BDNF
bNGF	MIF		

Neurodegeneration 9-Plex Human ProcartaPlex Panel 1			
Cat. No. EPX090-15836-901			
Tau (Total)	Tau (Phospho) [T181]	Aβ 1-40	Aβ 1-42
Neurogranin	TDP-43	KLK6	NCAM
FGF-21			

Neurodegeneration 4-Plex Human ProcartaPlex Panel 2			
Cat. No. EPX040-15832-901			
Apolipoprotein E4	Clusterin (Apo-J)	Complement Factor H	Fetuin-A

Brain Injury 5-Plex Human ProcartaPlex Panel			
Cat. No. EPX050-15838-901			
NF-H	GFAP	UCHL	S100b
NSE			

Neurotrophic Factors 4-Plex Human ProcartaPlex Panel			
Cat. No. EPX040-15828-901			
GDNF	CNTF	BDNF	bNGF

Neuroinflammation 6-Plex Human ProcartaPlex Panel			
Cat. No. EPX060-15833-901			
IL-34	CXCL13 (BLC)	MIF	Soluble RAGE
TREM-2	YKL40/CHI3L1		

\* Panel cannot be combined with other ProcartaPlex panels or Simplex kits. For Research Use Only. Not for use in diagnostic procedures.

## ProcartaPlex mouse panels

Th1/Th2 Cytokine 11-Plex Mouse ProcartaPlex Panel				A
Cat. No. EPX110-20820-901				
GM-CSF	IL-2	IL-6	IL-18	
IFN-gamma	IL-4	IL-12 p70	TNF-alpha	
IL-1 beta	IL-5	IL-13		

Th9/Th17/Th22/Treg Cytokine 6-Plex Mouse ProcartaPlex Panel				B
Cat. No. EPX060-20822-901				
IL-9	IL-17A	IL-23		
IL-10	IL-22	IL-27		

Cytokine 10-Plex Mouse ProcartaPlex Panel 1B				C
Cat. No. EPX100-26091-901				
G-CSF (CSF-3)	IL-28	IL-3	M-CSF (CSF-1)	
IFN-alpha	IL-31	LIF		
IL-15 (IL-15R)	IL-1 alpha	ENA-78 (CXCL5)		

Chemokine 9-Plex Mouse ProcartaPlex Panel 1				D
Cat. No. EPX090-20821-901				
Eotaxin (CCL11)	MCP-1 (CCL2)	MIP-1 beta (CCL4)		
GRO-alpha (CXCL1)	MCP-3 (CCL7)	MIP-2 (CXCL2)		
IP-10 (CXCL10)	MIP-1 alpha (CCL3)	RANTES (CCL5)		

## ProcartaPlex mouse panel combinations

Th9/Th17/Th22/Treg & Chemokine 15-Plex Mouse ProcartaPlex Panel	B	D
Cat. No. EPX150-26089-901		
Th1/Th2/Th9/Th17/Th22/Treg Cytokine 17-Plex Mouse ProcartaPlex Panel		A B
Cat. No. EPX170-26087-901		
Th1/Th2 & Chemokine 20-Plex Mouse ProcartaPlex Panel 1	A	D
Cat. No. EPX200-26090-901		
Cytokine & Chemokine 26-Plex Mouse ProcartaPlex Panel 1		A B D
Cat. No. EPX260-26088-901		
Cytokine & Chemokine 36-Plex Mouse ProcartaPlex Panel 1A	A B C	D
Cat. No. EPX360-26092-901		

## ProcartaPlex mouse panels for immune monitoring

Immune Monitoring 48-Plex Mouse ProcartaPlex Panel			
Cat. No. EPX480-20834-901			
GM-CSF	IL-15/IL-15R	IL-2RA	LIF
BAFF	IL-17A	IL-3	MCP-1
BTC	IL-18	IL-31	MCP-3
ENA-78//CXCL5	IL-19	IL-33	M-CSF
Eotaxin	IL-1a	IL-4	MIP-1 alpha
G-CSF/CSF-3	IL-1β	IL-5	MIP-1 beta
GROα/KC/CXCL1	IL-2	IL-6	MIP-2
IFN-alpha	IL-22	IL-7	RANKL
IFN-gamma	IL-23	IL-7Ra	RANTES
IL-10	IL-25/IL-17E	IL-9	ST2/IL-33R
IL-12p70	IL-27	IP-10	TNF-α
IL-13	IL-28	Leptin	VEGF-A

Immuno-Oncology Checkpoint 4-Plex Mouse ProcartaPlex Panel 1			
Cat. No. EPX040-20830-901			
BTLA	CD27	LAG-3	TIM-3

Immuno-Oncology Checkpoint 7-Plex Mouse ProcartaPlex Panel 2			
Cat. No. EPX070-20835-901			
CD137L (4-1BBL)	CD276 (B7-H3)	CD80	CTLA-4 (CD152)
PD-1	PD-L1	PD-L2	

## ProcartaPlex mouse panels for antibody isototyping

Antibody Isotyping 7-Plex Mouse ProcartaPlex Panel*			
Cat. No. EPX070-20815-901			
IgG1	IgM	IgA	IgE
IgG3	IgG2a	IgG2b	

Antibody Isotyping 7-Plex Mouse ProcartaPlex Panel 2*			
Cat. No. EPX070-20816-901			
IgG1	IgM	IgA	IgE
IgG3	IgG2b	IgG2c	

\* Panel cannot be combined with other ProcartaPlex panels or Simplex kits.

## ProcartaPlex rat panels

Th Complete 14-Plex Rat ProcartaPlex Panel			A
Cat. No. EPX140-30120-901			
G-CSF (CSF-3)	IL-2	IL-12p70	
GM-CSF	IL-4	IL-13	
IFN-gamma	IL-5	IL-17A (CTLA-8)	
IL-1 alpha	IL-6	TNF-alpha	
IL-1 beta	IL-10		

### Chemokine 8-Plex Rat ProcartaPlex Panel

Chemokine 8-Plex Rat ProcartaPlex Panel			B
Cat. No. EPX080-30121-901			
Eotaxin (CCL11)	MCP-1 (CCL2)	MIP-2 (CXCL2)	
GRO-alpha (KC/CXCL1)	MCP-3 (CCL7)	Rantes (CCL5)	
IP-10 (CXCL10)	MIP-1 alpha (CCL3)		

## ProcartaPlex rat panel combinations

Cytokine & Chemokine 22-Plex Rat ProcartaPlex Panel	A	B
Cat. No. EPX220-30122-901		

## ProcartaPlex rat panels for antibody isotyping

Antibody Isotyping 6-Plex Rat ProcartaPlex Panel*		
Cat. No. EPX060-30123-901		
IgG1	IgG2a	IgG2b
IgG2c	IgA	IgM

## ProcartaPlex rat panels for kidney toxicity

Kidney Toxicity 5-Plex Rat ProcartaPlex Panel 1*		
Cat. No. EPX050-30124-901		
KIM-1	VEGF-A	TFF-3
Osteopontin	Calbindin	
Kidney Toxicity 5-Plex Rat ProcartaPlex Panel 2*		
Cat. No. EPX050-30125-901		
Cystatin C	TIMP-1	Clusterin
Albumin	NGAL	

## ProcartaPlex nonhuman primate panels

Th 14-Plex NHP ProcartaPlex Panel			A
Cat. No. EPX140-40040-901			
GM-CSF	IL-5	IL-17A	
IFN-gamma	IL-6	IL-18	
IL-1 beta	IL-10	IL-23	
IL-2	IL-12p70	TNF-alpha	
IL-4	IL-13		

### Cytokine 6-Plex NHP ProcartaPlex Panel 1B

Cytokine 6-Plex NHP ProcartaPlex Panel 1B			B
Cat. No. EPX060-40042-901			
CD40L	IFN-alpha	IL-15	
G-CSF	IL-1 RA	IL-7	

### Chemokine 10-Plex NHP ProcartaPlex Panel

Chemokine 10-Plex NHP ProcartaPlex Panel			C
Cat. No. EPX100-40041-901			
BLC (CXCL13)	I-TAC (CXCL11)	MIP-1 beta (CCL4)	
Eotaxin (CCL11)	MCP-1 (CCL2)	SDF-1 alpha (CXCL12)	
IL-8 (CXCL8)	MIG (CXCL9)		
IP-10 (CXCL10)	MIP-1 alpha (CCL3)		

### Growth Factor 7-Plex NHP ProcartaPlex Panel

Growth Factor 7-Plex NHP ProcartaPlex Panel			D
Cat. No. EPX070-40043-901			
BDNF	PDGF-BB	VEGF-D	
NGF-beta	SCF		
FGF-basic	VEGF-A		

## ProcartaPlex porcine panels

Cytokine & Chemokine 9-Plex Porcine ProcartaPlex Panel 1		
Cat. No. EPX090-60829-901		
IFN-alpha	IL-4	IL-10
IFN-gamma	IL-6	IL-12/IL-23 p40
IL-1 beta	IL-8 (CXCL8)	TNF-alpha

## ProcartaPlex canine panels

Cytokine/Chemokine/Growth Factor 11-Plex Canine ProcartaPlex Panel 1		
Cat. No. EPX11A-50511-901		
IFN-gamma	IL-8 (CXCL8)	SCF
IL-2	IL-10	TNF-alpha
IL-4	IL-12/IL-23 p40	VEGF-A
IL-6	MCP-1 (CCL2)	

\* Panel cannot be combined with other ProcartaPlex panels or Simplex kits. For Research Use Only. Not for use in diagnostic procedures.

# ProcartaPlex high-sensitivity immunoassay kits



Invitrogen™ ProcartaPlex™ high-sensitivity immunoassay kits offer accurate quantitation of key cytokines significantly below the detection limit of conventional Luminex assays.

## ProcartaPlex high-sensitivity immunoassay kits feature

- Highest sensitivity detection of cytokine concentrations, in fg/mL
- Inter- and intra-assay CV <10%
- Small sample input (25 µL) ideal for precious serum or plasma samples
- Easy-to-use, simple ELISA-like protocol completed in less than 4 hr
- Convenient, ready-to-use kits for quantitation of up to 9 cytokines
- Trusted platform based on the principles of a sandwich ELISA and utilizing Luminex xMAP (multianalyte profiling) technology

The ProcartaPlex high-sensitivity immunoassays enable the multiplexed analysis of human and mouse analytes in very low concentrations in various matrices, including serum, plasma, bodily fluids, and cell culture supernatant samples. These high-sensitivity multiplex assays are ideal when sample input is limited, and protein expression is in the low pg/mL range.

Accurate quantitation below conventional limits is achieved through a proprietary signal amplification technology. The signal amplification has negligible effects on the assay background, thereby increasing the signal-to-noise ratio of the cytokine standards on the lower end of the standard curve. This also allows for more accurate and reproducible measurement of cytokines with low expression levels.

## ProcartaPlex high-sensitivity panels

High Sensitivity 9-Plex Human ProcartaPlex Panel		
Cat. No. EPXS090-12199-901		
IFN-gamma	IL-4	IL-12 p70
IL-1 beta	IL-6	IL-17A (CTLA-8)
IL-2	IL-10	TNF-alpha

High Sensitivity 5-Plex Mouse ProcartaPlex Panel		
Cat. No. EPXS050-22199-901		
IFN-gamma	IL-4	TNF-alpha
IL-2	IL-6	

## Assay specifications and data

Measure low-abundance cytokines with our ProcartaPlex high-sensitivity immunoassays. We offer simplex kits and panels for human and mouse cytokines. Find the most current offering of our available high-sensitivity assays at [thermofisher.com/highsensitivityprocarta](http://thermofisher.com/highsensitivityprocarta).

ProcartaPlex Simplex human high-sensitivity kits					
Cat. No.	Analyte	ULOQ*	LLOQ**	Inter-assay CV	Intra-assay CV
EPXS010-10283-901	GM-CSF	7,330	1.8	<10	<10
EPXS010-10228-901	IFN-γ	260	0.31	<10	<10
EPXS010-10224-901	IL-1 β	1,330	0.32	<10	<10
EPXS010-10221-901	IL-2	490	0.44	<10	<10
EPXS010-10225-901	IL-4	560	0.86	<10	<10
EPXS010-10278-901	IL-5	2,720	0.66	<10	<10
EPXS010-10213-901	IL-6	2,850	1.03	<10	<10
EPXS010-10204-901	IL-8	890	0.22	<10	<10
EPXS010-10215-901	IL-10	750	0.18	<10	<10
EPXS010-10238-901	IL-12p70	3,090	0.75	<10	<10
EPXS010-12017-901	IL-17A	1,030	0.25	<10	<10
EPXS010-10281-901	MCP-1	650	0.16	<10	<10

ProcartaPlex Simplex mouse high-sensitivity kits					
Cat. No.	Analyte	ULOQ*	LLOQ**	Inter-assay CV	Intra-assay CV
EPXS010-20606-901	IFN-gamma	1,250	0.31	<10	<10
EPXS010-20601-901	IL-2	1,820	0.44	<10	<10
EPXS010-20613-901	IL-4	3,530	0.86	<10	<10
EPXS010-20603-901	IL-6	4,230	1.03	<10	<10
EPXS010-20607-901	TNF-alpha	1,830	0.45	<10	<10

\* Upper limit of quantitation.

\*\* Lower limit of quantitation.

# Immunoassay Special Services

Our immunoassay R&D team has over 30 years of experience with immunoassay development, sample handling, data analysis, and project management. Operating in an ISO 9001–certified facility, we employ high-quality standards and procedures.

- Not sure where to start? We offer valuable consultation services, free of charge.
- Can't find a commercially available assay for your target? We offer custom assay development.
- Short on staff resources? Tight deadlines? Or just want experienced scientists to run your samples and provide results to you? We offer sample testing services.
- Starting a large or long-term research project? We offer helpful services like special bulk packaging and lot reservation.

## Custom immunoassay development and services

- Have us develop a custom assay unique to your target, with project milestones and progress reports
- Request custom plate coating to enable consistency across experiments (ELISA only)
- Request additional QC testing of assays

## Special packaging

- Obtain products in bulk packaging for less waste, better use of storage space, or high-throughput automation needs
- Request additional components or special formulation

## Sample testing services

- Send us your samples and we will run the assay for you

## Lot reservation

- Request multiple kits from a single lot for large or long-term studies

## Immunoassay support center

### Assay development service

Custom assay development services are available for protein targets that are not commercially available. By using our services, you leverage years of assay development experience without wasting your time. Let us help save you time so you can work on the important parts of your research.

- Utilize technical specialists with over 30 years of assay development experience
- Save time and money, and avoid the hassle of optimizing and troubleshooting
- Be confident that you're getting the best assay possible

Access the custom assay services quote request form at [thermofisher.com/immunoassayrequests](http://thermofisher.com/immunoassayrequests)

### Sample testing service

No Luminex instrument available? Not sure if this is the right platform for you? Our service team comprises highly skilled and experienced professionals who will work with you throughout the stages of your project to help ensure delivery of high-quality data and results. This allows you to test the technology and see if the data meets your expectations.

- Be confident that your samples are being tested by experienced technical specialists
- Receive high-quality reports of your assay data
- Minimal investment needed to make a decision before investing in the Luminex platform

Find out more about sample testing services at [thermofisher.com/iarequests](http://thermofisher.com/iarequests)

Find out more about QuantiGene assays at [thermofisher.com/quantigeneassayservice](http://thermofisher.com/quantigeneassayservice)

# ProcartaPlex Mix and Match panels



## Design your own multiplex panel

Build the panel of your choice with our online Invitrogen™ ProcartaPlex™ Panel Configurator. Design your own custom assay blend at [thermofisher.com/mixandmatchluminex](http://thermofisher.com/mixandmatchluminex).

ProcartaPlex analytes	Human	Mouse	Rat	NHP	Canine	Porcine
4-1BB (CD137)	•					
4-1BBL (CD137L)	•					
6Ckine (CCL21)	•					
Albumin*			•			
Adiponectin	•	•		•		
Amyloid beta (1–40)	•					
Amyloid beta (1–42)	•					
Angiogenin	•					
Angiopoietin-1	•					
Angiotatin	•					
Antithrombin*	•					
Apolipoprotein E4	•					
APRIL	•					
Arginase-1	•					
AXL	•					
B7-H6	•					
BACE1 (beta-secretase 1)	•					
BAFF	•	•				
BLC (CXCL13)	•			•		
BDNF	•			•		
Betacellulin (BTC)			•			
Big ET-1	•					
BMP-2	•					
BMP-9	•					
BTLA (CD272)	•	•				
C-peptide	•					
C3a	•					
Calcitonin	•					
CALR (CRT)	•					
Caspase-3 (total)	•					
CD14	•					
CD27	•	•				
CD28	•					
CD30	•					
CD30L	•					
CD36	•					
CD40	•					
CD40L	•			•		
CD44	•					
CD44var (6var)	•					
CD80 (B7-1)	•					
CD134 (OX40)	•					
CD137L (4-1BBL)		•				
CD276 (B7-H3)	•	•				
CD47 (IAP)	•					
CD48 (BLAST-1)	•					

ProcartaPlex analytes	Human	Mouse	Rat	NHP	Canine	Porcine
CD80			•			
CHI3L1/YKL-40	•					
CKMB	•					
Clusterin*				•		
Clusterin (Apo-J)	•					
CNTF	•					
COMP	•					
Complement factor H	•					
Cortisol	•					
CRP	•	•	•			
CTACK (CCL27)	•					
CTF-1	•					
CTLA-4 (CD152)		•				
Cysistin C*				•		
Cystatin C	•					
D-Dimer	•					
DR6	•					
E-cadherin	•					
EDA-1	•					
EGF	•					
Elafin	•					
EMMPRIN	•					
ENA-78 (CXCL5)	•	•				
Endoglin (CD105)	•					
Endostatin	•					
Eotaxin (CCL11)	•	•	•	•		
Eotaxin-2 (CCL24)	•					
Eotaxin-3 (CCL26)	•					
E-selectin (CD62E)	•					
Factor V*	•					
Factor VII*	•					
Factor VIII*	•					
Factor IX*	•					
Factor X*	•					
Factor XI*	•					
Factor XII*	•					
Factor XIII*	•					
Fas (APO)	•					
Fas-L	•					
Ferritin	•					
Fetuin-A	•					
FGF-2	•			•		
FGF-21	•					
FGF-23	•					
Fibrinogen	•					
Flt3-ligand	•					

ProcartaPlex analytes	Human	Mouse	Rat	NHP	Canine	Porcine
Follistatin	•					
Fractalkine (CX3CL1)	•					
Galectin-3	•					
Galectin-9	•					
GAPDH	•					
GAS6	•					
G-CSF (CSF-3)	•	•	•	•		
GCP-2 (CXCL6)	•					
GDF-15	•					
GDNF	•					
GFAP	•					
GITR (CD357)	•					
GITRL	•					
GM-CSF	•	•	•	•		
gp130 (IL-6RB)	•					
Granzyme A	•					
Granzyme B	•					
GRO alpha (KC/CXCL1)	•	•	•			
GLP-1	•					
Ghrelin	•					
HB-EGF	•					
HER-2	•					
HGF	•					
HSP60	•					
HVEM (CD270)	•					
I-309 (CCL1)	•					
Insulin	•					
ICAM-1	•			•	•	
ICOS ligand (B7-H2)	•					
IFN-alpha	•	•	•	•		
IFN-beta	•	•	•			
IFN-gamma	•	•	•	•	•	
IFN-omega	•	•				
IgA*	•	•	•			
IgE*	•	•	•			
IgG1*	•	•	•			
IgG2*	•					
IgG2a*			•	•		
IgG2b*			•	•		
IgG2c*			•	•		
IgG3*			•	•		
IgG4*			•			
IgM*	•	•	•			
IDO	•					
IL-1 alpha	•	•	•			
IL-1 beta	•	•	•	•		

ProcartaPlex analytes	Human	Mouse	Rat	NHP	Canine	Porcine
IL-1 RA	•			•		
IL-2	•	•	•	•	•	
IL-2RA (CD25)	•	•				
IL-3	•	•				
IL-4	•	•	•	•	•	•
IL-5	•	•	•	•		
IL-6	•	•	•	•	•	•
IL-7	•	•		•		
IL-7RA (CD127)			•			
IL-8 (CXCL8)	•			•	•	•
IL-9	•	•				
IL-10	•	•	•	•	•	•
IL-12/IL-23p40	•	•	•	•	•	•
IL-12 p70	•	•	•	•		
IL-13	•	•	•	•		
IL-15	•			•		
IL-15/IL-15R			•			
IL-16	•					
IL-17A (CTLA-8)	•	•	•	•		
IL-17AF	•					
IL-17F	•	•		•		
IL-18	•	•		•		
IL-19			•			
IL-20	•					
IL-21	•	•	•			
IL-22	•	•				
IL-23	•	•		•		
IL-25			•			
IL-27	•	•				
IL-29 (IFN-lambda 1)	•					
IL-31	•	•				
IL-33	•	•				
IL-34	•					
IL-37	•					
IP-10 (CXCL10)	•	•	•	•		
I-TAC (CXCL11)	•			•		
Kallikrein-6 (KLK6)	•					
KIM-1*			•			
KRT18	•					
Lactoferrin	•					
LAG-3	•	•				
LAP (TGF-beta 1)	•					
LDH-B	•					
Leptin	•	•	•			
LIGHT	•					
LIF	•	•				
LOX-1	•					
Lp-PLA2	•					
L-selectin	•					
LYVE-1	•					
MBL	•					
MCP-1 (CCL2)	•	•	•	•	•	
MCP-2 (CCL8)	•					
MCP-3 (CCL7)	•	•	•	•		
MCP-4 (CCL13)	•					
M-CSF	•	•				
MDC (CCL22)	•					
Mer (MERTK)	•					

ProcartaPlex analytes	Human	Mouse	Rat	NHP	Canine	Porcine
MICA	•					
MICB	•					
MIF	•					
MIG (CXCL9)	•					
MIG (CXCL9)			•			
MIP-1 alpha (CCL3)	•	•	•	•		
MIP-1 beta (CCL4)	•	•		•		
MIP-2 alpha (CXCL2)	•	•	•			
MIP-3 alpha (CCL20)	•					
MIP-3 beta (CCL19)	•					
MMP-1	•					
MMP-2	•					
MMP-3	•					
MMP-7	•					
MMP-8	•					
MMP-9	•					
MMP-12	•					
MMP-13	•					
MPIF (CCL23)	•					
Myeloperoxidase (MPO)	•					
Myoglobin	•					
NCAM-1	•					
Nectin-2	•					
Neurogranin (NRGN)	•					
NF-H	•					
NGAL	•		•*			
NGF-beta	•		•	•	•	
NRP-1	•					
NSE	•					
NTproBNP	•					
NT5E	•					
Oncostatin M (OSM)	•					
Osteopontin	•		•*			
Osteoprotegerin (OPG)	•					
PAI-1 (Serpin)	•			•		
PDGF-BB	•			•		
PD-1			•			
PD-1 (CD279)	•					
PD-L1			•			
PD-L1 (CD274)	•					
PD-L2	•	•				
PECAM-1	•					
Perforin	•					
PIGF	•					
Protein C*	•					
Protein S*	•					
Prothrombin*	•					
P-selectin	•					
PTX3	•					
PVR	•					
PYY	•					
RAGE	•					
RBP4	•					
RANKL	•	•	•			
RANTES (CCL5)	•	•	•	•		
REG3a	•					
Resistin (ADSF)	•				•	
S100A8/A9	•					

ProcartaPlex analytes	Human	Mouse	Rat	NHP	Canine	Porcine
S100B	•					
SAA	•					
SAP (Pentraxin 2)	•					
SCF	•					
SCGF-beta	•					
SDF-1 alpha (CXCL12a)	•					
Siglec-7	•					
Siglec-9	•					
ST-2	•					
ST2 (IL-33R)	•	•				
Survivin (BIRC5)	•					
Syndecan-1	•					
TARC (CCL17)	•					
Tactile	•					
Tau (Total)	•					
Tau [pT181]	•					
Tau [pT231]	•					
TDP-43	•					
TECK (CCL25)	•					
Tenascin-C	•					
TFF-3*					•	
TGF-alpha	•					
TGF-beta 1	•	•	•	•	•	•
Thrombopoietin (TPO)	•					
TIE-2	•					
TIM-3 (CD366)	•	•				
TIMD-4	•					
TIMP-1	•				•*	
TNF-alpha	•	•	•	•	•	•
TNF-beta	•					•
TNF-R1	•					
TNF-R2	•					
TNI	•					
tPA	•					
TRAIL	•					•
TRAIL-R1	•					
TRAIL-R2	•					
TREM-1	•					
TREM-2	•					
TSLP	•		•			
Tweak	•					
TYRO3	•					
UCHL1	•					
ULBP-1	•					
ULBP-3	•					
ULBP-4	•					
uPAR	•					
VCAM-1	•				•	•
VEGF-A	•	•	•	•	•	•
VEGF-D	•					•
VEGF-R1	•					
VEGF-R2	•					
VEGF-R3	•					
VISTA (B7-H5)	•					
vWF*	•					
ZAG	•					

\* Analytes only available as part of a panel.

# Multiplexed gene expression assays: QuantiGene Plex assays



Accurate and precise RNA quantitation of up to 80 gene transcripts in a single well (96- and 384-well format)

## Overview of QuantiGene

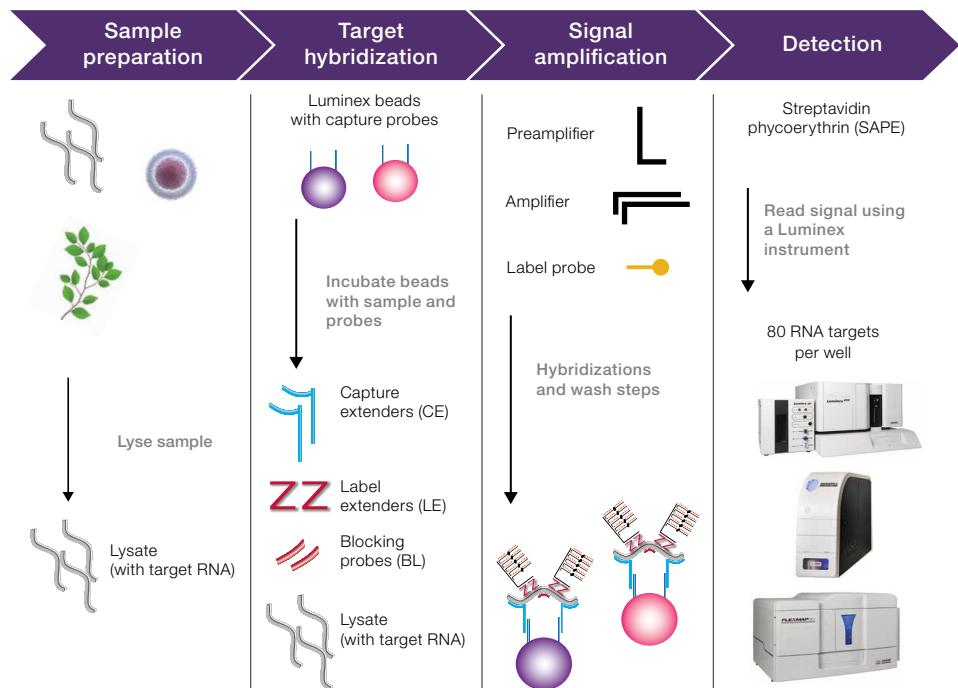
### Plex assays

The QuantiGene Plex assays provide an accurate and precise method for multiplexed gene expression quantitation. Using the Luminex xMAP technology, QuantiGene Plex assays allow for simultaneous measurement of 3–80 RNA species in every well of a 96- or 384-well plate. Branched DNA assays allow for the direct measurement of RNA transcripts by using signal amplification rather than template amplification.

The QuantiGene Plex assays are simple and easy to use; they don't require RNA extraction, cDNA synthesis, or PCR amplification. QuantiGene Plex assays are ideal for verifying microarray or next-generation sequencing (NGS) data and for verifying biomarkers for translational research.

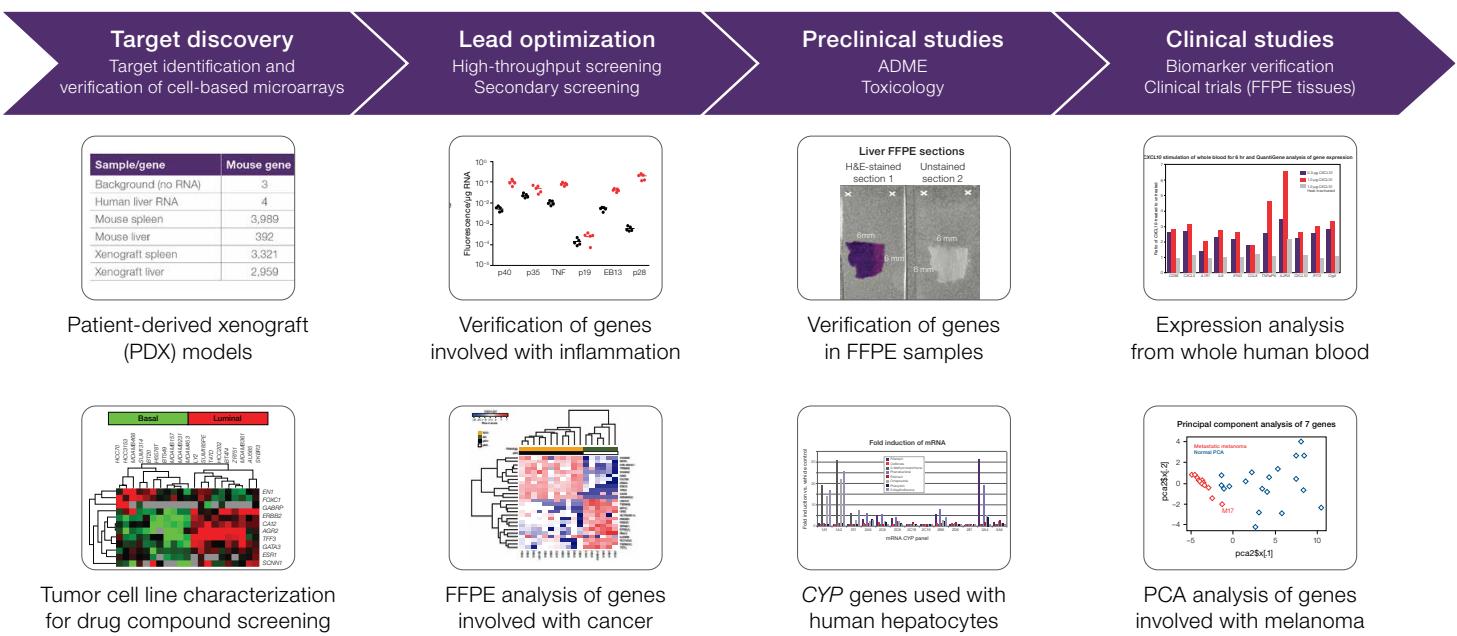
## Key features and benefits of the assay

- **Works with difficult sample types**—works with degraded and crosslinked RNA in formalin-fixed, paraffin-embedded (FFPE) tissues and directly with blood, with no RNA purification required
- **True multiplexing**—measure up to 80 genes of interest and housekeeping genes in the same well with no cross-reactivity; reduces the number of sample wells and sample amount needed
- **Standardized platform**—96-well plate format compatible with Luminex 100/200, MAGPIX, and FLEXMAP 3D systems
- **Simple workflow**—ELISA-like workflow for direct hybridization of transcripts to beads and transcript labeling, and no reverse transcription needed
- **Large inventory of verified genes**—over 22,500 genes can be mixed in up to 80-plex panels to create pathway- and disease-themed panels
- **Faster customization than other methods**—if we don't have your gene(s), we can create and QC your custom panel typically in 2–3 weeks
- **ISH compatible**—same technology utilized in the Invitrogen™ ViewRNA™ Kits for mRNA *in situ* hybridization (ISH)



## QuantiGene Plex assay applications

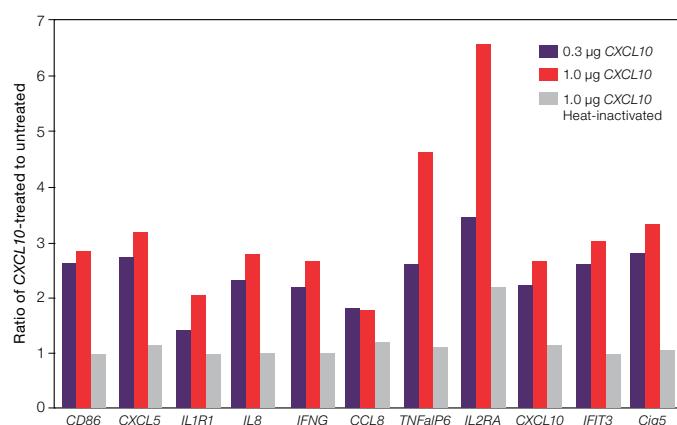
QuantiGene Plex assays for RNA profiling are ideal for supporting drug discovery and development efforts, as well as translational and clinical research. The examples below highlight the capabilities and benefits of this powerful research tool.



### Application: Stimulation of whole human blood

CXCL10-responsive gene induction was confirmed using a QuantiGene 12-plex panel to test RNA isolated from whole blood of a healthy donor. Whole blood was stimulated ex vivo with CXCL10. Gene induction was shown to be dose-dependent (Figure 12) and was eliminated upon heat inactivation of the chemokine. Gene expression was normalized to the expression level of the GAPDH housekeeping gene and presented as the ratio of treated:untreated. Data courtesy of Medarex Inc., a BMS Company [5].

**Benefit:** QuantiGene Plex assays work directly with whole blood without the need for globin depletion or RNA purification.



**Figure 12. CXCL10 stimulation of whole blood for 6 hr and QuantiGene analysis of gene expression.** Data source: Witte A et al. Medarex—CXCL10 expression and biological activities in inflammatory bowel disease. Paper presented at: The Digestive Disease Week Meeting; 2008 May 19–21; San Diego, CA.

# QuantiGene Plex assays (continued)

## QuantiGene Plex assay service

Accelerate your research by outsourcing your gene expression profiling projects that use QuantiGene Plex assays. Let us test and analyze your samples, freeing up your valuable resources for other discovery research. Our assay service is designed to help you meet your specific project goals and timelines.

Our QuantiGene Plex assay services offer the following features and benefits:

- **Consistency**—all assays and reagents used in the service are from Thermo Fisher Scientific
- **Design support**—help save time by accessing our bioinformatics team to customize your probe and panel design
- **Flexibility**—sample types include purified RNA and cultured cells
- **Choice**—a comprehensive list of applications

Find out more at

[thermofisher.com/quantigeneassayservice](http://thermofisher.com/quantigeneassayservice)

## QuantiGene Plex data analysis software

A new cloud-based software is now available to support data analysis for QuantiGene Plex gene expression assay results. The software includes an intuitive workflow that guides you step by step once you have uploaded your run data from your Luminex instrument. Easily assign control and treatment groups, select QC parameters, and perform data normalization. Access the cloud-based software at [apps.thermofisher.com/apps/quantigene](http://apps.thermofisher.com/apps/quantigene). Analyzed data can be exported to the Applied Biosystems™ Transcriptome Analysis Console (TAC) software for advanced analysis and visualization. When combined with TAC, the analysis allows for better visualization and interpretation using representations like scatter and volcano plots, hierarchical clustering, and link outs to publicly available annotations. Download a free copy of TAC software at [thermofisher.com/tac](http://thermofisher.com/tac).

Available features:

- Analyze data from 96- and 384-well plates
- Rank normalization genes and calculation of P values during fold-change analysis
- Group samples and analyze fold change in groups
- Export data for advanced analysis using TAC software

## Specifications

The QuantiGene Plex assay can be used for RNA profiling.

Feature	Specification
Limit of detection	≤1,000–2,000 transcripts/assay well
Limit of quantitation	≤2,000–4,000 transcripts/assay well
Linear dynamic range	≥3.0 logarithmic units
Assay CV	≤15% intra-assay; ≤20% inter-assay
Compatible sample types	Cultured cells, bacteria, whole blood, PAXgene™ samples, Invitrogen™ Tempus™ samples, dried blood spots, fresh-frozen tissues (animal or plant), FFPE samples, purified RNA
Assay format	96- or 384-well plate
Targets/well	3–80

## Off-the-shelf panels

We have also developed over 5,200 panels that cover over 22,500 genes. These available panels cover a wide range of host species that include: human, mouse, rat, canine, monkey, porcine, soy, maize, and many others. Any combination of existing genes can be combined to create a new panel. To find the latest panels and genes, go to [thermofisher.com/qgppanels](http://thermofisher.com/qgppanels) or contact one of our probe designers at [lsg.qgprobe@thermofisher.com](mailto:lsg.qgprobe@thermofisher.com).

## Custom panels

Custom QuantiGene Plex panels are available for any gene and any species. Custom panels ranging from 3- to 80-plex can be designed and shipped typically within 2-3 weeks. Customers simply provide us with a gene list, RefSeq IDs, or DNA sequences.

## Below are some examples of the genes included in 80-plex panels

See the list of a selection of verified 80-plex panels and the rest of our 5,200 panels at [thermofisher.com/qgppanels](http://thermofisher.com/qgppanels).

### Human Apoptosis 80-plex panel

CASP6	CARD8	BNIP2	DAPK1	BAG3	HPR1	TNFRSF10A	BID	TNFRSF7	LTR	TNFRSF9	BIRC8	CASP3	TP53	BIRC3	TNFRSF1A
PYCARD	AKT1	BRAF	TP53BP2	BAD	BCL2L1	TP73	GADD45A	FADD	TNFRSF21	BCL2L2	NOL3	FASLG	CASP8	PPIB	CASP4
CASP1	CASP2	BCLAF1	ABL1	TNF	TNFSF10	TNFRSF11B	APAF1	TNFSF8	CASP14	IGF1R	BCL10	LTA	TNFRSF10B	CASP9	BCL2L11
TRAF4	BFAR	MCL1	BIRC6	TNFSF5	BAG1	BCL2A1	BAK1	CIDEB	TRAF2	TRAF3	CFLAR	CASP10	CD40	BNIP3L	RIPK2
CASP7	BAG4	BIRC1	BCL2L10	TRADD	BNIP1	TNFRSF25	BAX	BNIP3	BIRC2	CARD4	CARD6	CIDEA	FAS	BCL2	BIK

### Human Oncogene 80-plex panel

NUASAP1	ERBB3	WNT2	SPARC	RAB17	PRAME	GJB1	SLC7A1	MCAM	RNF157	ACSL3	TRPM4	CACNA1D	TOP2A	BRAF	SPARCL1
MYLK	BIRC5	ARPC2	CDKN1B	POU2F3	CCNE1	FN1	E2F1	ZNF577	PHIP	HIF1A	KIF20A	MAGEA1	C10orf137	HPRT1	BUB1
CASP8	KLK3	CDKN2B	CCND1	RB1	CDH2	YWHAZ	MCM6	DSC1	MCM4	MITF	VCAN	SPP1	MKI67	MYRIP	PCSK6
TP53	NCOA3	PCNA	TFRC	F10	ITGB1	CCR7	PGK1	PTEN	ITGB3	MMP10	MMP9	GSTP1	MMP2	MLANA	BCL2A1
RAD54B	MET	GCNT1	AQP3	MCM10	WNT5A	DCT	TBP	GPC3	CDKN2A	PRKCA	ITGB4	CRISP3	CCNA1	GUSB	PLAUR

### Human Cytokine 80-plex panel

IL1F6	IL1F7	IFNA5	IFNA8	IL1F8	IFNB1	IL19	CD70	IL3	IL1F10	IL17E	FAM3B	NODAL	TNFSF13	GDF3	TNFSF4
BMP4	INHBA	TNFSF12	BMP2	TGFB3	CSF1	BMP1	BMP6	GDF2	GDF5	GDF9	BMP7	TXLNA	BMP3	TNFSF13B	IL16
TNFSF14	IL1F5	GDF10	BMP8B	IL24	IL9	TNF	IL12A	IL22	IL13	IL17A	TNFSF10	TNFSF11	TGFB1	IL7	TGFA
PDGFA	IL12B	TGFB2	TNFRSF11B	IL10	BMP5	IL5	GAPDH	IL18	GDF11	IFNA2	IL2	CSF2	IL20	FASLG	IL1F9
IFNA1	IL4	IFNG	LTA	IL6	FIGF	ACTB	IL1B	IL1A	GDF8	IL15	LTB	IFNK	PPIB	IL8	IL21

### Human Inflammation 80-plex panel

PYCARD	MAPK3	SUGT1	MAP3K7IP1	MAP3K7	MEFV	MAPK12	PSTPIP1	MAPK13	TNFSF14	PEA15	RIPK2	PANX1	NLRX1	NALP1	NLRP9
TNFSF4	P2RX7	NLRP4	MAP3K7IP2	BIRC1	NLRP5	BIRC4	NLRP3	NLRP5	AIM2	BIRC2	CARD6	CASP1	CASP5	CHUK	CIITA
CTSB	HSP90AA1	TRA1	IKBKB	IKBKG	IRF2	MAPK9	NFKB1	MAPK8	NFKBIA	RAGE	TNF	TNFSF5	IL12A	BCL2	TNFSF11
ICEBERG	CASP4	IRF1	IL12B	MAPK1	GAPDH	CXCL1	CASP8	TRAF6	CXCL2	CCL5	CCL7	RELA	PTGS2	IFNG	IL6
TIRAP	IRAK1	ACTB	IL1B	TXNIP	MYD88	CARD12	BIRC3	CCL2	PPIB	IFNB1	NOD2	IL18	BCL2L1	HSPCB	NALP12

# QuantiGene Plex assays (continued)

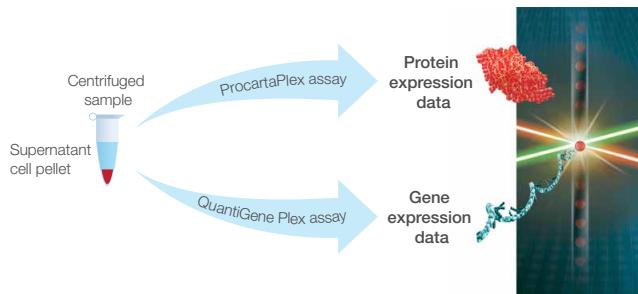
## QuantiGene Plex panels—pathway guide

QuantiGene Plex pathway panels	Human	Mouse	Rat	QuantiGene Plex pathway panels	Human	Mouse	Rat
<b>Apoptosis and autophagy</b>				<b>Metabolism and endocrinology</b>			
Apoptosis	•	•	•	Adipogenesis	•	•	•
Autophagy	•	•		Fatty acid metabolism	•	•	
Unfolded protein response	•	•		Glucose metabolism	•	•	•
<b>Cancer signaling</b>				Diabetes	•	•	•
Angiogenesis	•	•	•	Glycosylation	•	•	
Angiogenic growth factors and angiogenesis inhibitors	•	•	•	Insulin signaling pathway	•	•	•
Breast cancer and estrogen receptor signaling	•	•	•	Mitochondria	•	•	•
Cancer pathway	•	•	•	Mitochondrial energy metabolism	•	•	
Cancer drug resistance and metabolism	•	•		Hypertension	•	•	•
Cell cycle	•	•	•	Obesity	•	•	•
Epithelial to mesenchymal transition (EMT)	•	•		<b>Neuroscience</b>			
Extracellular matrix and adhesion molecules	•	•	•	Neurogenesis and neural stem cell	•	•	•
Oncogenes and tumor suppressor genes	•	•		Neuroscience ion channels and transporters	•	•	•
Tumor metastasis	•	•	•	Neurotransmitter receptors and regulators	•	•	•
<b>Cardiology and bone biology</b>				Neurotrophin and receptors	•	•	•
Atherosclerosis	•	•		<b>Stem cells</b>			
Osteogenesis	•	•	•	Embryonic stem cells	•	•	
Skeletal muscle—myogenesis and myopathy	•	•	•	Endothelial cell biology	•	•	•
<b>Epigenetics</b>				Hematopoietic stem cells and hematopoiesis	•	•	
Epigenetic chromatin modification enzymes	•	•		Mesenchymal stem cell	•	•	
Epigenetic chromatin remodeling factors	•	•		Stem cell	•	•	•
Polycomb group (PcG) genes and DNA methylation	•	•		Stem cell signaling	•	•	
Transcription factors	•	•	•	Terminal differentiation markers	•	•	
<b>Inflammation and immunology</b>				<b>Toxicity and drug metabolism</b>			
Cell surface markers	•			Cardiotoxicity	•	•	•
Chemokines and receptors	•	•	•	Drug metabolism	•	•	•
Cytokines	•	•	•	Drug metabolism phase I enzymes	•	•	•
Cytoskeleton regulators	•	•		Drug metabolism phase II enzymes	•	•	
Dendritic and antigen-presenting cells	•	•		Drug transporters	•	•	•
HIV infection and host response	•			Hepatotoxicity	•	•	•
Inflammation	•	•		Lipoprotein signaling and cholesterol metabolism	•	•	•
Inflammasomes	•	•	•	Nephrotoxicity	•	•	•
Inflammatory cytokines and receptors	•	•	•	Neurotoxicity	•	•	•
Inflammatory response and autoimmunity	•	•	•	Stress and toxicity	•	•	•
Innate and adaptive immune responses	•	•		Toxicity	•		
Interferon $\alpha$ and $\beta$ responses	•	•		<b>Housekeeping genes</b>			
Interferon and receptor	•			Housekeeping genes	•	•	•
Interferon (IFN) and receptor	•	•		<b>Custom</b>			
T cell and B cell activation	•	•	•	Any gene for any model organism	•	•	•
T cell activation	•	•					
T cell anergy and immune tolerance	•	•					
Th1/Th2/Th17	•	•	•				
Th17 for autoimmunity and inflammation	•	•	•				
T helper cell differentiation	•	•					
Toll-like receptor signaling pathway	•	•	•				
Tumor necrosis factor (TNF) ligand and receptor	•	•					

Design a custom verified QuantiGene Plex assay at  
[thermofisher.com/order-quantigene-plex](http://thermofisher.com/order-quantigene-plex)

## Analyze both protein and gene expression from a single sample

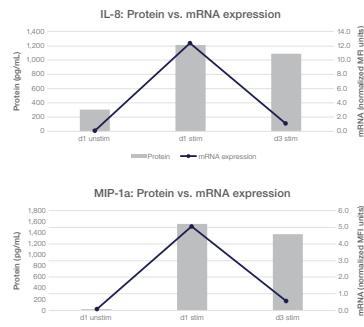
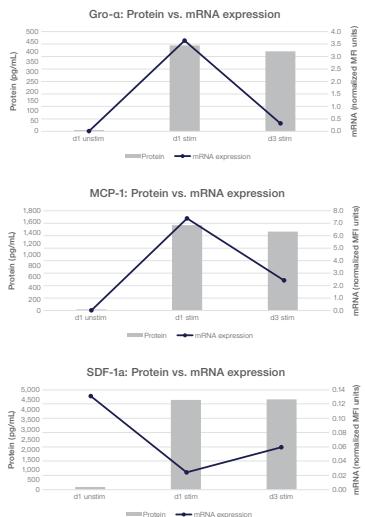
Protein and gene expression data can be generated from the same sample, giving researchers more information about that sample. After a cell culture is centrifuged, the supernatant is analyzed for multiple cytokines using the ProcartaPlex assay. The cell pellet is then lysed and run using the QuantiGene Plex assay to obtain gene expression data (Figure 13).



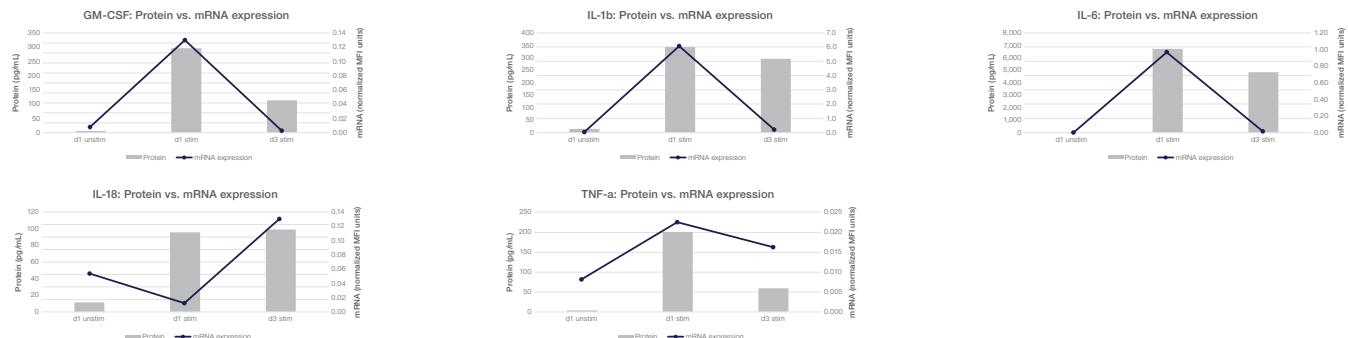
**Figure 13.** Protein and gene expression data from a single sample.

## Multiplex application—analysis of protein and gene expression from the same sample

**A**



**B**



**Figure 14.** Protein and gene expression analysis of several cytokines. Human PBMCs were isolated using Ficoll-Paque PLUS (GE Healthcare, Cat. No. 17-1440-02) and grown in Gibco™ OpTimizer™ T Cell Expansion SFM (Cat. No. A10221-01). The cells were then stimulated with 10 µg/mL LPS for up to 72 hours. Cells were lysed using Invitrogen™ QuantiGene™ Sample Processing Kit for cultured cells (Cat. No. QS0100) at 24 (d1) and 72 hours (d3), and supernatants were tested for cytokine/chemokine/growth factor proteins in the Invitrogen™ ProcartaPlex™ Human 65-plex panel (Cat. No. EPX650-10065-901) and in an identical biomarker configuration for mRNA using the Invitrogen™ QuantiGene™ Plex Assay Kit (Cat. No. QP1013). The data show a sampling of the results for inflammatory chemokines (**A**) and Th1/Th2 cytokines (**B**), and demonstrate the ease of multiplex measurement of proteins and RNA from a single sample. MFI = median fluorescence intensity. Additional data can be found at [thermofisher.com/quantiGene](http://thermofisher.com/quantiGene).

# Additional gene expression solutions

## Gene expression profiling solutions

Comprehensive solutions for gene expression profiling, verification, and analysis are supported by sequencing, microarrays, and real-time PCR technologies. For discovery, in particular, *de novo* discovery of differentially expressed genes (DEGs), transcriptome sequencing provides a hypothesis-neutral approach that allows interrogation of any gene in the sample, with a wide dynamic range to allow differential gene expression analysis of low-expressing genes. For analysis deep within the known transcriptome, transcriptome-level microarrays provide fast profiling of coding and noncoding genes, exons, and transcript isoforms. Well-annotated gene expression analysis can be performed with gene-level microarrays. DEGs can be verified using mid-throughput real-time PCR formats such as Applied Biosystems™ TaqMan® OpenArray™ Panels and TaqMan® Array Cards, and the resulting genes of interest can be quantified more precisely by digital PCR or real-time PCR with Applied Biosystems™ TaqMan® Gene Expression Assays. Testing experiments can also be performed to further examine the behavior of these genes across a larger population of samples.

## Gene expression profiling by sequencing

You can get the same simple workflow with the same flexibility, now faster and more scalable than ever. The Ion Torrent™ GeneStudio™ S5 series is a line of benchtop NGS systems that enable you to efficiently run small and large projects across multiple research applications, with the simplest sample-to-data benchtop NGS workflow and superior speed. With flexibility powered by the ability to choose from five Ion Torrent™ chips, these systems offer an opportunity to conduct wide-ranging experiments on a single platform. A single instrument can scale easily to accommodate multiple RNA analysis applications, throughputs, and data outputs including:

- Whole-transcriptome analysis
- Small RNA analysis
- Targeted RNA sequencing

Find out more at [thermofisher.com/genestudio](http://thermofisher.com/genestudio)



## Gene expression profiling by microarrays

Accelerate your expression biomarker discovery research with Applied Biosystems™ Clariom™ assays, the next generation of transcriptome profiling tools offering a fast path to results.



- Generate expression profiles from as little as 100 pg of total RNA—as few as 10 cells
- Analyze RNA from a wide variety of sample types, including cells, whole blood, and fresh or fresh-frozen, or FFPE tissues
- Preserve sample integrity and reduce variability with no need for globin or ribosomal RNA removal
- Transcriptome profiling of coding and long noncoding genes, exons, and splice variants with the Applied Biosystems™ Clariom™ D Pico Assay
- Well-annotated gene-level only expression profiling with the Clariom S Pico Assay
- Short noncoding RNA profiling with the Applied Biosystems™ GeneChip™ miRNA 4.0 Assay

Find out more at [thermofisher.com/transcriptomeprofiling](http://thermofisher.com/transcriptomeprofiling)



### Gene expression analysis by real-time PCR

Real-time PCR is the gold-standard technique for verification of differential gene expression profiles. Our comprehensive offering of TaqMan Gene Expression Assays and flexible formats enable fast and cost-effective results. We are the leader in gene expression analysis, providing world-class sample preparation with Applied Biosystems™ technologies, real-time PCR using TaqMan or Applied Biosystems™ SYBR™ Green chemistry, the popular Applied Biosystems™ QuantStudio™ family of real-time PCR instruments, as well as data analysis software.

The TaqMan assay technology is the gold standard in performance, quality, and content for gene expression analysis. With predesigned TaqMan Assays, spend your time generating results, and not designing and optimizing assays.

- Detect virtually any gene product—more than 1.5 million predesigned assays, and custom designs for everything else
- Assays for nearly every human, mouse, and rat gene in the RefSeq database
- Available for 25 species, and some pathogens
- Assays for multiple locations per transcript and across nearly every exon junction in human genes

Find out more at [thermofisher.com/qpcr](http://thermofisher.com/qpcr)



### Gene expression quantification by digital PCR

Digital PCR enables highly precise measurements and is able to resolve changes in gene expression level of two-fold or less. Digital PCR can also be used to determine the absolute quantification of a transcript without the need for a reference gene.

Now, you can go beyond the limits of real-time PCR with the Applied Biosystems™ QuantStudio™ 6 Flex Real-Time PCR System. The system is ideal for laboratories with multiple applications or end users on a limited budget. Easily interchangeable thermal cycling block formats let you select the format (96-well, 96-well Fast, and 384-well) that best suits your project without having to move attached peripherals or computers. The intuitive software, easy touchscreen setup, and effortless block changes are designed to let you get started right away.

Find out more at [thermofisher.com/quantstudio6flex](http://thermofisher.com/quantstudio6flex)

# Comprehensive immunoassay product listing

## Targets across immunoassay formats

The data presented in this table are typical performance results reported on manufactured lots at the time of publication. For the most up-to-date performance data for each individual kit, go to [thermofisher.com/immunoassays](http://thermofisher.com/immunoassays), and enter the

Cat. No. or name of the kit. (White rows indicate Invitrogen™ products and gray rows indicate Invitrogen™ eBiosciences™ products. Products within each brand have biomarker correlation across available formats. Data available upon request. NA = not applicable.)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
4-1BB (CD137/TNFRSF9)	Human	Coated ELISA	Serum, plasma: 50 µL; CCS: 100 µL	10 pg/mL	10–3,000 pg/mL	EHTNFRSF9
	Mouse	Coated ELISA	Serum, plasma: 10 µL; CCS: 100 µL	6 pg/mL	6–1,500 pg/mL	EMTNFRSF9
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	7.87 pg/mL	12.21–50,000 pg/mL	EPX01A-10289-901
4-1BB ligand (CD137L)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		168.95–692,000 pg/mL	EPX010-15901-901
6Ckine (CCL21)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	13.27 pg/mL	13.35–54,700 pg/mL	EPX010-12384-901
17-hydroxyprogesterone	Multispecies	Competitive ELISA	Serum, plasma, CCS: 50 µL	20.3 pg/mL	24.69–6,000 pg/mL	EIA17OHP
ACE	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	0.12 ng/mL	0.12–30 ng/mL	EMACE
Acetylcholinesterase	Multispecies	Activity Kit	Serum, plasma, CCS: 100 µL	0.218 mU/mL	6.25–100 mU/mL	EIAACHEF
Activin A	Human	Coated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–5,000 pg/mL	EHACTIVINA
	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–400 pg/mL	ERINHBA
ADAM9	Human	Coated ELISA	CCS, plasma, serum: 100 µL	45 pg/mL	45–12,000 pg/mL	EHADAM9
ADAM11 (MDC)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1.5 pg/mL	1.5–400 pg/mL	EHADAM11
ADAM17 (TACE)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	70 pg/mL	70–5,000 pg/mL	EHADAM17
Adiponectin	Mouse	Coated ELISA	Serum: 10 µL	50 pg/mL	0.125–8 ng/mL	KMP0041
	Rat	Coated ELISA	Serum, plasma: 33 µL; CCS: 100 µL	50 pg/mL	0.375–24 ng/mL	KRP0041
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.6 pg/mL	56.15–230,000 pg/mL	EPX01A-12032-901
Aggrecan (PG)	Human	Coated ELISA	50 µL (1:5,000 prediluted)	0.012 ng/mL	0.23–15 ng/mL	BMS2032-2
	Human	ProQuantum	CCS, serum, plasma: 2–5 µL	<0.7 pg/mL	0.76–1,500,000 pg/mL	A44838
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	6.3 pg/mL	82.42–337,600 pg/mL	EPX01A-26038-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.3 pg/mL	38.45–157,500 pg/mL	EPX01A-42032-901
AgRP (agouti-related protein)	Human	Coated ELISA	Serum, CCS, synovial fluid: 50 µL	0.9 ng/mL	10–250 ng/mL	KAP1461
AHSG (fetuin A)	Human	Coated ELISA	Serum, plasma: 50 µL; CCS: 100 µL	6 pg/mL	6–1,800 pg/mL	EHAGRP
AKT (total)	Multispecies	Coated ELISA	Cell lysate: 10 µL	<0.1 ng/mL (1,500 cells)	0.3–20 ng/mL	KHO0101
AKT [pS473]	Multispecies	Coated ELISA	Cell lysate: 10 µL	<0.8 U/mL (4,000 cells)	1.6–100 U/mL	KHO0111
AKT [pT308]	Multispecies	Coated ELISA	Cell lysate: 10 µL	<0.8 U/mL (4,000 cells)	0–100 U/mL	KHO0201
AKT colorimetric in-cell	Human	Coated ELISA	NA	NA	NA	62215
AKT near infrared in-cell	Human	Coated ELISA	NA	NA	NA	62220
AKT activation	Multispecies	InstantOne ELISA	Cell lysate: 10 µL	<0.8 U/mL	1.6–100 U/mL	85-86049
AKT (total/phospho)	Multispecies	InstantOne ELISA	Cell lysate: 20 µL	<0.8 U/mL	1.6–100 U/mL	85-86046
AKT1 (total)	Human	Coated ELISA	Cell lysate: 10 µL	0.1 ng/mL	0.3–30 ng/mL	KHO0531
AKT1 [pS473]	Human	Coated ELISA	Cell lysate: 10 µL	0.1 U/mL	0.3–25 U/mL	KHO0541
Albumin	Human	Coated ELISA	CCS, plasma, serum: 100 µL	60 pg/mL	60–12,000 pg/mL	EHALB
ALCAM (CD166)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–5,000 pg/mL	EHALCAM
Aldosterone	Multispecies	Competitive ELISA	Serum, plasma, CCS: 100 µL	4.97 pg/mL	15–4,000 pg/mL	EIAALD
alpha-fetoprotein	Human	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–1,800 pg/mL	EHAFP
alpha-synuclein	Human	Coated ELISA	50 µL	<0.2 ng/mL	0.23–15 ng/mL	KHB0061
Amphiregulin (AREG)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–4,000 pg/mL	EHAREG
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	8–600 pg/mL	EMAREG
AMPK [pT172]	Multispecies	Coated ELISA	Cell lysate: 10 µL	<1 U/mL	1.6–100 U/mL	KHO0651
Amyloid beta (aggregated)	Human	Coated ELISA	Supernatant, tissue homogenate: 50 µL; CSF, ventricular fluid: 100 µL	<0.01 ng/mL	0.09–5.7 ng/mL	KHB3491
Amyloid precursor protein (APP)	Human	Coated ELISA	Cell lysate, CSF: 10 µL	<0.4 ng/mL	0.78–50 ng/mL	KHB0051

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
Amyloid beta 40	Human	Coated ELISA	CCS, CSF, tissue homogenate: 50 µL	<6 pg/mL	9.8–500 pg/mL	KHB3481
	ProcartaPlex	Serum, plasma, CSF: 25 µL	242.9 pg/mL	451–1,847,000 pg/mL	EPX010-12350-901	
	Mouse	Coated ELISA	CCS, CSF, tissue homogenate: 10 µL	<5 pg/mL	7.81–500 pg/mL	KMB3481
Amyloid beta 42	Human	Coated ELISA	CCS, CSF, tissue homogenate: 50 µL	<10 pg/mL	15.6–1,000 pg/mL	KHB3441
	ProcartaPlex	Serum, plasma, CSF: 25 µL	0.3 pg/mL	0.4–1,700 pg/mL	EPX010-12351-901	
	Mouse	Coated ELISA	CCS, CSF, tissue homogenate: 10 µL	<3 pg/mL	3.12–200 pg/mL	KMB3441
Amyloid beta 42 US	Human	Ultrasensitive Coated ELISA	CCS, CSF, tissue homogenate: 25 µL	<1 pg/mL	1.56–100 pg/mL	KHB3544
Angiogenin	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1.5 pg/mL	1.5–400 pg/mL	EHANG
	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.07 pg/mL	0.1–600 pg/mL	EPX010-12234-901	
Angiopoietin-1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–18,000 pg/mL	EHANGPT1
	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	22.99 pg/mL	32.40–132,700 pg/mL	EPX010-12235-901	
Angiopoietin-2	Human	Coated ELISA	CCS, plasma, serum: 100 µL	<6 pg/mL	31.2–2,000 pg/mL	KHC1641
Angiopoietin-4	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.25 ng/mL	0.25–200 ng/mL	EHANGPT4
Angiopoietin-like 3 (ANGPTL3)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	40 pg/mL	40–10,000 pg/mL	EMANGPTL3
Angiopoietin-like 4	Human	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–20,000 pg/mL	EHANGPTL4
Angiostatin	Human	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–2,000 ng/mL	EHANGIOSTATIN
	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.86 pg/mL	1.3–5,150 pg/mL	EPX010-12237-901	
Annexin V	Human	Coated ELISA	CCS, serum: 50 µL	0.33 ng/mL	0.78–50 ng/mL	BMS252
Anti-IFN alpha	Human	Coated ELISA	CCS, plasma, serum: 20 µL	1.4 ng/mL	3.15–200 ng/mL	BMS217
Apolipoprotein A1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.08 ng/mL	0.08–20 ng/mL	EHAPOA1
Apolipoprotein C1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–50,000 pg/mL	EHAPOC1
Apolipoprotein C2	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1.5 ng/mL	1.5–100 ng/mL	EHAPOC2
Apolipoprotein C3	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2.5 pg/mL	2.5–10,000 pg/mL	EHAPOC3
Apolipoprotein E (AD2)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1.5 ng/mL	1.5–400 ng/mL	EHAPOE
Apolipoprotein E3	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.4 ng/mL	0.4–100 ng/mL	EHAPOE3
Apolipoprotein E4	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.4 ng/mL	0.4–100 ng/mL	EHAPOE4
	ProcartaPlex	Serum, plasma, CSF: 25 µL	14.747 pg/mL	195–800,000 pg/mL	EPX010-12344-901	
APRIL	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.78 pg/mL	90.70–371,500 pg/mL	EPX01A-12008-901
	Coated ELISA	Serum, plasma: 50 µL	0.4 ng/mL	0.78–50 ng/mL	BMS2008	
Arginase-1	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	9.87 pg/mL	12.21–50,000 pg/mL	EPX010-12216-901
	Coated ELISA	Serum, plasma, CCS: 50 µL	20.81 pg/mL	78.1–5,000 pg/mL	BMS2216	
Atrial natriuretic peptide (ANP)	Multispecies	Competitive ELISA	Serum, plasma, CCS: 50 µL	0.25 ng/mL	0.7–180 ng/mL	EIAANP
AXL	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–2,000 pg/mL	EHAXL
		Coated ELISA	CCS, plasma, serum: 50 µL	7.46 pg/mL	31.25–2,000 pg/mL	BMS2286
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	241.8 pg/mL	244–1,000,000 pg/mL	EPX010-12286-901
B7-H6	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	51.186 pg/mL	118,51–485,400 pg/mL	EPX010-12328-901
BACE1 (Beta-secretase 1)	Human	ProcartaPlex	Serum, plasma, CSF: 25 µL	410.098 pg/mL	200–817,400 pg/mL	EPX010-12358-901
BAFF	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.6 pg/mL	2.9–11,800 pg/mL	EPX01A-12007-901
	Instant ELISA	CCS, plasma, serum: 50 µL	0.13 ng/mL	0.31–20 ng/mL	BMS2007INST	
BAFF R (TNFRSF13C)	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	2.88–11,800 pg/mL	EPX01A-26096-901
B2M (beta-2-microglobulin)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–1,000 pg/mL	EHB2M
BCAM (basal cell adhesion molecule; CD239)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	40 pg/mL	40–10,000 pg/mL	EHBCAM
Bcl-2	Human	Coated ELISA	Cell lysate, plasma, serum: 20 µL	0.5 ng/mL	0.50–32 ng/mL	BMS244-3
BCL2L2 (Bcl-2-like protein 2; BCL-W)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	60 pg/mL	60–16,000 pg/mL	EHBCL2L2
BCL2L2 (Bcl-2-like protein 2; BCL-W)	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	0.4 ng/mL	0.4–100 ng/mL	ERBCL2L2
BDNF	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	12 pg/mL	12–3,000 pg/mL	ERBDNF
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.02 pg/mL	2.44–10,000 pg/mL	EPX01A-12116-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.02 pg/mL	2.44–10,000 pg/mL	EPX01A-42116-901
beta-catenin (total)	Human	Coated ELISA	Cell lysate: 10 µL	<0.30 ng/mL	0.78–50 ng/mL	KHO1211
Betacellulin (BTC)	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	6.4 pg/mL	30–122,900 pg/mL	EPX01A-26042-901
beta-secretase 1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1.0 ng/mL	1.0–250 ng/mL	EHBACE1

## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
Big ET-1	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.47 pg/mL	0.50–2,050 pg/mL	EPX010-12266-901
		Coated ELISA	Serum, plasma, CCS: 50 µL	0.185 pg/mL	0.4–25 pg/mL	BMS2266
Blood urea nitrogen (BUN)	Multispecies	Detection Kit	Serum, plasma, CCS: 50 µL	0.030 mg/dL	0.156–10 mg/dL	EIA BUN
BMP-2 (bone morphogenetic protein 2)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	45 pg/mL	45–3,000 pg/mL	EHBMP2
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5.966 pg/mL	52–211,100 pg/mL	EPX010-12319-901
BMP-4 (for lysates) (bone morphogenetic protein 4)	Human	Coated ELISA	Tissue lysates, cell lysates: 100 µL	15 pg/mL	15–6,000 pg/mL	EHBMP4CL
BMP-4 (bone morphogenetic protein 4)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–6,000 pg/mL	EHBMP4
BMP-5 (bone morphogenetic protein 5)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	250 pg/mL	0.25–60 ng/mL	EHBMP5
BMP-6 (bone morphogenetic protein 6)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	150 pg/mL	150–50,000 pg/mL	EHBMP6
BMP-7 (bone morphogenetic protein 7)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–6,000 pg/mL	EHBMP7
BMP-7 (bone morphogenetic protein 7)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–1,000 pg/mL	EMBMP7
BMP-9	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	8.22 pg/mL	6.47–25,600 pg/mL	EPX010-12246-901
BTC (betacillin)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–18,000 pg/mL	EHBTC
BTLA (CD272)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	38.21 pg/mL	122.7–500,000 pg/mL	EPX01A-12217-901
		Coated ELISA	CCS, plasma, serum: 25 µL	16.7 pg/mL	78.13–5,000 pg/mL	BMS2217
Butyrylcholinesterase	Multispecies	Activity Kit	Serum, plasma, CCS: 100 µL	0.018 mU/mL	0.3–20 mU/mL	EIA BCHEF
C1q	Human	Coated ELISA	Serum, plasma: 10 µL (1:100 prediluted) CCS: 50 µL	0.08 ng/mL	0.9–60 ng/mL	BMS2099
C3a	Human	Coated ELISA	Plasma, serum: 10 µL (prediluted 1:500 for plasma, 1:30 for serum) CCS: 50 µL	0.07 ng/mL	0.3–20 ng/mL	BMS2089
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.6 pg/mL	12.2–5,000 pg/mL	EPX010-12282-901
C5a	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	1.5 pg/mL	1.5–400 pg/mL	EMHC
	Human	Coated ELISA	Serum: 5 µL; plasma: 10 µL; CCS: 50 µL	0.005 ng/mL	0.078–5.0 ng/mL	BMS2088
CA19-9 (carbohydrate antigen 19-9)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.3 U/mL	0.3–200 U/mL	EHCA199
CA9 (carbonic anhydrase IX)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.2 pg/mL	0.2–50 pg/mL	EHCA9
Calcitonin	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.74 pg/mL	2.23–9,150 pg/mL	EPX01A-12067-901
Cardiotrophin 1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–12,000 pg/mL	EHCTF1
Cardiotrophin 1 (CT-1)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	200 pg/mL	0.2–60 ng/mL	EMCTF1
Caspase-3	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.59 pg/mL	4.88–20,000 pg/mL	EPX01A-12012-901
		Instant ELISA	CCS, plasma, serum: 10 µL	0.12 ng/mL	0.16–10 ng/mL	BMS2012INST
Caspase 3 (cleaved) colorimetric in-cell	Multispecies	Coated ELISA	NA	NA	NA	62218
Caspase 3 (cleaved) near infrared in-cell	Multispecies	Coated ELISA	NA	NA	NA	62223
Caspase-3 (active)	Human	Coated ELISA	Cell lysate: 10 µL	0.033 ng/mL	0.039–2.5 ng/mL	KHO1091
Caspase-8	Human	Coated ELISA	CCS, plasma, serum: 50 µL	0.1 ng/mL	0.16–10 ng/mL	BMS2024
Caspase-9	Human	Coated ELISA	CCS, plasma, serum: 50 µL	0.4 ng/mL	1.6–100 ng/mL	BMS2025
Catalase	Multispecies	Activity Kit	Serum, plasma, CCS: 25 µL	0.052 U/mL	0.15–5.0 U/mL	EIA CATC
Cathepsin L	Human	Coated ELISA	CCS, serum: 50 µL	1.7 ng/mL	3.1–50 ng/mL	BMS257
Cathepsin S (CTSS)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–1,000 pg/mL	EHC TSS
CCL1 (I-309)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–3,000 pg/mL	EHC CL1
CCL1 (TCA-3)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–8,000 pg/mL	EMC CL1
CCL3 (MIP-1 alpha)	Human	Instant ELISA	CCS, plasma, serum: 50 µL	<6 pg/mL	15.6–1,000 pg/mL	BMS2029INST
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–1,000 pg/mL	EMC CL3
	Human	Uncoated ELISA	CCS, plasma, serum: 100 µL	16 pg/mL	16–2,000 pg/mL	88-7035-22
CCL4 (MIP-1 beta)	Human	ProQuantum	CCS, serum, plasma: 2–5 µL	<0.6 pg/mL	0.64–10,000 pg/mL	A35616
	Human	Instant ELISA	CCS, plasma, serum: 50 µL	3.0 pg/mL	7.8–500 pg/mL	BMS2030INST
	Human	Uncoated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–500 pg/mL	88-7034-22
CCL6 (C10)	Human	ProQuantum	CCS, serum, plasma: 2–5 µL	<0.05 pg/mL	0.064–5,000 pg/mL	A35597
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	18 pg/mL	18–1,000 pg/mL	EMC CL6

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
CCL8 (MCP-2)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1.5 pg/mL	1.5–200 pg/mL	EHCCL8
	Human	Uncoated ELISA	CCS, plasma, serum: 10 µL	0.16 pg/mL	0.16–10 pg/mL	88-52169-22
	Human	ProQuantum	CCS, serum, plasma: 2–5 µL	<0.01 pg/mL	0.0128–5,000 pg/mL	A35599
CCL9 (MIP-1 gamma)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	1 pg/mL	1–250 pg/mL	EMCCL9
CCL12 (MCP-5)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	0.5 pg/mL	0.5–100 pg/mL	EMCCL12
CCL13 (MCP-4)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–200 pg/mL	EHCCL13
CCL14 (HCC-1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	7 pg/mL	7–1,500 pg/mL	EHCCL14
CCL15 (MIP-1 delta)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–1,000 pg/mL	EHCCL15
CCL16 (HCC-4)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–6,000 pg/mL	EHCCL16
CCL17 (TARC)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–2,500 pg/mL	EHCCL17
CCL17 (TARC)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–3,000 pg/mL	EMCCL17
CCL18 (PARC)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–2,000 pg/mL	EHCCL18
CCL19 (MIP-3 beta)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–500 pg/mL	EHCCL19
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–1,000 pg/mL	EMCCL19
	Human	Uncoated ELISA	CCS, plasma, serum: 100 µL	63 pg/mL	63–4,000 pg/mL	88-52107
CCL20 (MIP-3 alpha)	Human	Coated ELISA	Tissue lysates, cell lysates: 100 µL	1.5 pg/mL	1.5–600 pg/mL	EHCCL20CL
CCL20 (MIP-3 alpha)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1.5 pg/mL	1.5–600 pg/mL	EHCCL20
CCL20 (MIP-3 alpha)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–1,500 pg/mL	EMCCL20
CCL21 (SLC)	Human	Uncoated ELISA	CCS, plasma, serum: 50 µL	40.6 pg/mL	40.6–2,600 pg/mL	88-58214
CCL21A (6Ckine; SLC)	Mouse	Coated ELISA	Serum, plasma: 50 µL; CCS: 100 µL	20 pg/mL	20–1,000 pg/mL	EMCCL21A
CCL23 (MPIF-1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	7 pg/mL	7–6,000 pg/mL	EHCCL23
CCL25 (TECK)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	200 pg/mL	0.2–150 ng/mL	EHCCL25
CCL25 (TECK)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–2,000 pg/mL	EMCCL25
CD14	Human	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–6,000 pg/mL	EHD14
CD23 (sCD23/FCER2)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	6.8 U/mL	12.5–400 U/mL	BMS227/2
CD26 (DPP4)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	0.45 ng/mL	0.45–100 ng/mL	EMDPP4
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–3,000 pg/mL	BMS235
CD27	Human	Instant ELISA	CCS, plasma, serum: 100 µL	0.5 pg/mL	0.5–100 pg/mL	BMS286INST
	Human	ProcartaPlex	CCS, plasma, serum: 100 µL	30 pg/mL	30–20,000 pg/mL	EPX01A-10286-901
CD27	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.7 pg/mL	5–21,900 pg/mL	EPX010-26053-901
	Human	Coated ELISA	CCS, serum: 50 µL	0.2 ng/mL	0.78–50 ng/mL	BMS290
CD28	Human	ProcartaPlex	CCS: 50 µL, plasma, serum: 25 µL	0.44 ng/mL	0.5–2,000 ng/mL	EPX01A-10290-901
CD30	Human	Coated ELISA	CCS, plasma, serum: 25 µL	0.3 ng/mL	1.6–100 ng/mL	BMS240
	Human	ProcartaPlex	CCS, plasma, serum: 100 µL	20 pg/mL	20–15,000 pg/mL	EPX01A-10240-901
	Human	Instant ELISA	CCS, plasma, serum, urine: 25 µL	0.3 ng/mL	1.6–100 ng/mL	BMS240INST
CD30L (TNFSF8)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	185.13–758,300 pg/mL	EPX010-10298-901	
CD30L (TNFSF8)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	0.5 pg/mL	0.5–100 pg/mL	EMTNFSF8
CD31	Human	Instant ELISA	CCS, plasma, serum: 10 µL	0.06 ng/mL	0.47–30 ng/mL	BMS229INST
CD36	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–20,000 pg/mL	EMCD36
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	136.7 pg/mL	436–1,786,000 pg/mL	EPX010-12289-901
CD40	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–1,500 pg/mL	EMCD40
	Human	Coated ELISA	Amniotic fluid, CCS, plasma, serum: 50 µL	1.3 pg/mL	7.8–500 pg/mL	BMS265
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.98–12,200 pg/mL	EPX01A-10265-901	
CD40L	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1 pg/mL	5.7–23,400 pg/mL	EPX01A-10239-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	6 pg/mL	5.3–21,800 pg/mL	EPX01A-40239-901
	Human	Coated ELISA	CCS, plasma, serum: 15 µL	0.01 ng/mL	0.8–5 ng/mL	BMS293
	Human	Instant ELISA	CCS, plasma, serum: 20 µL	0.062 ng/mL	0.16–10 ng/mL	BMS239INST
CD44	Mouse	Coated ELISA	CCS, serum: 50 µL	0.14 ng/mL	0.31–20 ng/mL	BMS6010
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	85.63 pg/mL	49.90–204,400 pg/mL	EPX010-10209-901
CD44std	Human	Coated ELISA	20 µL (1:60 prediluted)	0.02 ng/mL	0.13–4 ng/mL	BMS209-2
	Human	Instant ELISA	20 µL (1:60 prediluted)	0.016 ng/mL	62.5–4,000 pg/mL	BMS209INST
CD44var (v5)	Human	Coated ELISA	20 µL (1:6 prediluted)	0.14 ng/mL	0.31–10 ng/mL	BMS220
	Human	Instant ELISA	CCS, plasma, serum: 10 µL	0.01 ng/mL	0.16–10 ng/mL	BMS220INST
CD44var (v6)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.13 pg/mL	24.4–100,000 pg/mL	EPX01A-10210-901
	Human	Coated ELISA	Plasma, serum, urine: 10 µL; CCS: 20 µL	0.05 ng/mL	0.32–10 ng/mL	BMS210
	Human	Instant ELISA	CCS, plasma, serum, urine: 10 µL	0.06 ng/mL	0.16–10 ng/mL	BMS210INST

## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
CD47 (IAP)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.84 pg/mL	6.13–25,100 pg/mL	EPX010-12329-901
CD48 (BLAST-1)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	18.7 pg/mL	24.42–116,400 pg/mL	EPX010-12330-901
CD80	Human	Instant ELISA	CCS, plasma, serum: 50 µL	0.1 ng/mL	0.31–20 ng/mL	BMS291INST
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	7.8 pg/mL	72–296,200 pg/mL	EPX010-26056-901
CD80 (B7-1)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	14.33 pg/mL	30.52–125,000 pg/mL	EPX01A-10291-901
CD93	Human	Uncoated ELISA	CCS, plasma, serum: 10 µL	3.3 ng/mL	3.3–400 ng/mL	88-50340-22
CD134 (OX40)	Human	Coated ELISA	CCS, serum: 25 µL	1.8 pg/mL	78–5,000 pg/mL	BMS296
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.984 pg/mL	7,52–30,800 pg/mL	EPX010-12333-901
CD137 (s4-1BB)	Human	Coated ELISA	CCS, serum: 50 µL	0.2 ng/mL	0.78–50 ng/mL	BMS289
CD137L (4-1BBL)	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	7.7 pg/mL	20–81,300 pg/mL	EPX010-26058-901
CD152 (CTLA-4)	Human	Coated ELISA	Amniotic fluid, CCS, plasma, serum: 10 µL	0.13 ng/mL	0.16–10 ng/mL	BMS276
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.72 pg/mL	12.21–50,000 pg/mL	EPX01A-10276-901
CD163 (M130)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–8,000 pg/mL	EHCD163
CD200	Human	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–6,000 pg/mL	EHCD200
CD226 (DNAM-1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	5 ng/mL	5–600 ng/mL	EHCD226
CD252 (OX40 L/TNFSF4)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–8,000 pg/mL	EMTNFSF4
CD276	Human	Uncoated ELISA	CCS, plasma, serum: 10 µL	0.16 ng/mL	0.16–10 ng/mL	88-50370
CD276 (B7-H3)	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	164.1 pg/mL	388–1,588,800 pg/mL	EPX010-26059-901
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	255.73 pg/mL	142.75–584,700 pg/mL	EPX010-12326-901
CD278 (ICOS)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1.2 ng/mL	1.2–300 ng/mL	EHICOS
CEACAM1 (BGP)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–15,000 pg/mL	EHCEACAM1
CEACAM5 (CEA)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	200 pg/mL	0.2–250 ng/mL	EHCEA
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.3 pg/mL	0.32–25,000 pg/mL	A46341
Ceruloplasmin	Multispecies	Activity Kit	Serum, plasma, CCS: 100 µL	3.26 mU/mL	31.2–1,000 mU/mL	EIACPLC
CFD (Adipsin)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–6,000 pg/mL	EHCDF
CHI3L1 (chitinase 3-like 1; YKL-40)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–1,500 pg/mL	EHCHI3L1
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	13.743 pg/mL	36–148,700 pg/mL	EPX010-12322-901
CKMB (CKM/CKB)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.3 ng/mL	0.3–80 ng/mL	EHKMB
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.7 pg/mL	3–11,300 pg/mL	EPX010-12264-901
Clusterin	Human	Coated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–20,000 pg/mL	EHCLU
Clusterin (Apo-J)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	276.003 pg/mL	220–900,000 pg/mL	EPX010-12345-901
Clusterin (CLU)	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	1.3 ng/mL	1.3–320 ng/mL	ERCLU
c-Met	Human	Coated ELISA	Cell lysate: 10 µL	0.4 ng/mL	0–50 pg/mL	KHO0251
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.3 pg/mL	0.32–25,000 pg/mL	A46338
c-Myc	Human	Coated ELISA	Cell lysate: 5 µL	<5 pg/mL	15.6–1,000 pg/mL	KHO2041
CNTF (ciliary neurotrophic factor)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	200 pg/mL	0.2–200 ng/mL	EHCNTF
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.479 pg/mL	2–7,150 pg/mL	EPX010-12341-901
Rat	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–2,000 pg/mL	ERCNTF	
COMP	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	725.9 pg/mL	357–1,461,800 pg/mL	EPX010-12317-901
Corticosterone	Multispecies	Competitive ELISA	TCS, serum, plasma, urine: 50 µL (1:100)	18.6 pg/mL	78.1–10,000 pg/mL	EIACORT
Cortisol	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		4,882.8–20,000,000 pg/mL	EPX010-12190-901
Cortisol	Multispecies	Competitive ELISA	Serum, plasma, CCS: 50 µL	17.3 pg/mL	100–3,200 pg/mL	EIAHCOR
Cortisone	Multispecies	Competitive ELISA	Serum, plasma, CCS: 50 µL	29.0 pg/mL	100–100,000 pg/mL	EIACOR
C-peptide	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		48.83–200,000 pg/mL	EPX010-12191-901
		Coated ELISA	CCS, plasma, serum: 50 µL	4.12 pg/mL	8.6–550 pg/mL	BMS2191
Creatinine urinary	Multispecies	Detection Kit	Serum, plasma, CCS: 50 µL	0.019 mg/dL	0.3–20 mg/dL	EIACUN
CREB (total)	Multispecies	Coated ELISA	Cell lysate: 10 µL	<0.025 ng/mL (10 <sup>4</sup> cells)	0.16–10 ng/mL	KHO0231
CREB [pS133]	Multispecies	Coated ELISA	Cell lysate: 10 µL	<0.5 U/mL	0.8–50 U/mL	KHO0241

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
CRP (C-reactive protein)	Human	Coated ELISA	Plasma, serum: 5 µL	<10 pg/mL	18.75–1,200 pg/mL	KHA0031
	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	200 pg/mL	0.2–60 ng/mL	ERCRP
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.29 pg/mL	4–18,000 pg/mL	EPX01A-10288-901
	Human	Coated ELISA	Serum, plasma: 100 µL	150 pg/mL	0.15–10 ng/mL	88-7502-28
	Instant ELISA		100 µL (1:500 prediluted)	3 pg/mL	78–5,000 pg/mL	BMS288INST
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.4 pg/mL	40.62–166,400 pg/mL	EPX01A-26045-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	2.44–10,000 pg/mL	EPX01A-36047-901
	Rat	Coated ELISA	Serum, plasma: 1 µL; urine, CCS: 100 µL	2 ng/mL	2–133 ng/mL	88-7501-28
CRT (CALR)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	309.8 pg/mL	764–3,130,900 pg/mL	EPX010-12295-901
CTACK (CCL27)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–10,000 pg/mL	EHCCL27
	Mouse	Coated ELISA	Plasma, serum: 50 µL; CCS: 100 µL	15 pg/mL	15–18,000 pg/mL	EMCCL27A
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.3 pg/mL	7.23–29,600 pg/mL	EPX01A-12188-901
CTF-1	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	8.86 pg/mL	11.35–46,500 pg/mL	EPX010-12254-901
CTLA-4 (CD152)	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5.1 pg/mL	9–38,500 pg/mL	EPX010-26060-901
CTLA-4 (cytotoxic T-lymphocyte protein 4)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–1,200 pg/mL	EMCTLA4
Cu/ZnSOD1	Human	Coated ELISA	Amniotic fluid, fetal umbilical vein blood, CCS, Plasma, serum, urine: 10 µL	0.04 ng/mL	0.8–5 ng/mL	BMS222
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–2,000 pg/mL	EMCXCL13
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5 pg/mL	6.3–25,800 pg/mL	EPX01A-12147-901
CXCL13 (BLC)	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	60 pg/mL	37.89–155,200 pg/mL	EPX01A-42147-901
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	700 pg/mL	700–21,000 pg/mL	EHCXCL14
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	0.8 ng/mL	0.8–200 ng/mL	EMCXCL15
CXCL16	Human	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–2,000 pg/mL	EHCXCL16
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	1.3 pg/mL	1.3–80 pg/mL	EMCXCL16
	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–1,800 pg/mL	ERCXCL2
CXCL2 (CINC-3)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	45 pg/mL	45–2,500 pg/mL	EHCXCL6
				0.39 pmol/mL (nonacetylated); 0.04 pmol/mL (acetylated)	0.78–200 pmol/mL (nonacetylated); 0.08–20 pmol/mL (acetylated)	
				0.6 pmol/mL (nonacetylated); 0.06 pmol/mL (acetylated)	0.8–500 pmol/mL (nonacetylated); 0.08–50 pmol/mL (acetylated)	EMSCAMPL
Cyclic AMP	Multispecies	Competitive ELISA	CCS, CL, TH: 100 µL			
Cyclic GMP	Multispecies	Competitive ELISA	CCS, CL, TH: 100 µL			
Cystatin C	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	25.25 pg/mL	27.98–114,600 pg/mL	EPX010-12279-901
Cystatin (CST3)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	300 pg/mL	0.3–20 ng/mL	EHCST3
Cystatin (CST3)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–3,200 pg/mL	EMCST3
Cystatin (CST3)	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	1.2 ng/mL	1.2–750 ng/mL	ERCST3
Cytochrome c	Human	Coated ELISA	Cell lysate: 10 µL	<0.156 ng/mL	0.078–5 ng/mL	KHO1051
DCN (decorin)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1.5 pg/mL	1.5–700 pg/mL	EHDCN
DCN (decorin)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–1,000 pg/mL	EMDCN
DcR3 (TNFRSF6B)	Human	Coated ELISA	Plasma, serum: 50 µL; CCS: 100 µL	0.3 ng/mL	0.3–80 ng/mL	EHTNFRSF6B
D-dimer	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.08 pg/mL	0.08–60 pg/mL	EHDDIMER
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	132 pg/mL	317.99–1,302,500 pg/mL	EPX01A-12149-901
Dehydroepiandrosterone sulfate (DHEA-S)	Multispecies	Competitive ELISA	Serum, plasma, CCS: 50 µL	90.9 pg/mL	96–60,000 pg/mL	EIADHEA
DIABLO (SMAC)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	100 pg/mL	0.1–30 ng/mL	EHDIAIBLO
DKK-1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	100 pg/mL	100–30,000 pg/mL	EHDKK1
DKK-1	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	25 pg/mL	25–6,000 pg/mL	EMDKK1
DKK-3	Human	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–2,000 pg/mL	EHDKK3
DKK-4	Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–10,000 pg/mL	EHDKK4
DLL1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	45 pg/mL	45–12,000 pg/mL	EHDLL1
DMP1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	80 pg/mL	80–40,000 pg/mL	EHDMP1
DNA damage	Multispecies	Competitive ELISA	Serum, plasma, CCS: 50 µL	50.9 pg/mL	62.5–8,000 pg/mL	EIADNAD
DR5 (TNFRSF10B)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–600 pg/mL	EHTNFRSF10B
DR6	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	33.19 pg/mL	17.41–71,300 pg/mL	EPX01A-15904-901
E-cadherin	Human	Coated ELISA	100 µL	100 ng/mL	100–2,700 ng/mL	991700
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	25.07 pg/mL	36.28–148,600 pg/mL	EPX010-12315-901
E-cadherin (CDH1)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–3,000 pg/mL	EMCDH1

## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
EGF	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.35 pg/mL	12.55–51,400 pg/mL	EPX01A-15903-901
	NHP	Coated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–2,000 pg/mL	EPEGF
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–800 pg/mL	EMEGF
	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	0.8 pg/mL	0.8–200 pg/mL	EREGF
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.85 pg/mL	2.93–12,000 pg/mL	EPX01A-12070-901
		Instant ELISA	CCS, plasma, serum: 50 µL	0.26 pg/mL	3.91–250 pg/mL	BMS2070INST
		Coated ELISA	CCS, plasma, serum: 100 µL; urine: 10 µL	<1 pg/mL	3.9–250 pg/mL	KHG0062
	Human	ProQuantum	CCS, plasma, serum: 2–5 µL	<0.01 pg/mL	0.0128–5,000 pg/mL	A35579
EGFR (full-length)	Human	Coated ELISA	Cell lysate: 10 µL	<0.08 ng/mL (10 <sup>4</sup> cells)	0.16–10 ng/mL	KHR9061
EGFR [pY1173]	Human	Coated ELISA	Cell lysate: 10 µL	<0.3 U/mL	1.67–100 U/mL	KHR9071
EGFR [pY1068]	Human	Coated ELISA	Cell lysate: 10 µL	1.6 U/mL	1.67–100 U/mL	KHR9081
EGFR colorimetric in-cell	Multispecies	Coated ELISA	NA	NA	NA	62205
EGFR near infrared in-cell	Multispecies	Coated ELISA	NA	NA	NA	62210
EG-VEGF (PROK1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–10,000 pg/mL	EHPROK1
Elafin	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5.24 pg/mL	1.83–7,500 pg/mL	EPX010-12248-901
EMMPRIN	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.59 pg/mL	4.74–19,400 pg/mL	EPX010-12242-901
ENA-78 (CXCL5/LIX)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–18,000 pg/mL	EHCXCL5
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	35 pg/mL	35–2,000 pg/mL	EMCXCL5
	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–6,000 pg/mL	ERCXCL5
	Coated ELISA	Tissue lysates, cell lysates: 100 µL	15 pg/mL	15–6,000 pg/mL	ERCXCL5CL	
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5.67 pg/mL	11.1–45,400 pg/mL	EPX01A-26043-901
Endocan (ESM1)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	8.06–33,000 pg/mL	EPX01A-12119-901
Endoglin (CD105)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.1 ng/mL	0.1–30 ng/mL	EMESM1
Endostatin	Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–3,000 pg/mL	EHENG
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.09 pg/mL	0.61–2,500 pg/mL	EPX01A-12105-901
Eotaxin (CCL11)		Instant ELISA	CCS, plasma, serum: 10 µL	2.6 pg/mL	15.6–1,000 pg/mL	BMS2105INST
Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–10,000 pg/mL	EHCOL18A1	
Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.19 pg/mL	5–194,000 pg/mL	EPX010-12238-901	
Endothelin-1 (ET-1)	Human	Coated ELISA	Serum, plasma, CCS: 50 µL	0.579 pg/mL	0.78–100 pg/mL	EIAET1
ENC1 (CCL28)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	25 pg/mL	25–20,000 pg/mL	EHENC1
Human	Coated ELISA	CCS, plasma, serum: 50 µL	<2.2 pg/mL	7.8–500 pg/mL	KAC2231	
Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.4 pg/mL	0.61–2,500 pg/mL	EPX01B-12120-901	
Human	ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.64–5,000 pg/mL	A35580	
Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	1 pg/mL	1–100 pg/mL	EMCCL11	
Eotaxin-2 (CCL24)	Mouse	Coated ELISA	CCS, serum: 50 µL	3.6 pg/mL	31.3–2,000 pg/mL	BMS6008
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.01 pg/mL	0.5–2,000 pg/mL	EPX01A-26008-901
	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.1 pg/mL	1.9–7,700 pg/mL	EPX01A-36008-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.4 pg/mL	7.56–31,000 pg/mL	EPX01B-42120-901
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–1,000 pg/mL	EHCCL24
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–800 pg/mL	EMCCL24
Eotaxin-3 (CCL26)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.9 pg/mL	3.42–14,000 pg/mL	EPX01A-12150-901
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.01 pg/mL	0.3–1,400 pg/mL	EPX01A-12140-901
EPCAM (TROP1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	45 pg/mL	45–12,000 pg/mL	EHEPCAM
Epiregulin (EREG)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–6,000 pg/mL	EMEREG
EPO receptor	Human	Coated ELISA	CCS, plasma, serum: 100 µL	180 pg/mL	187.5–12,000 pg/mL	EHEPOR
ERK 1/2 (total/phospho)	Multispecies	InstantOne ELISA	Cell lysate: 20 µL			85-86013
ERK 1/2 (total)	Multispecies	InstantOne ELISA	Cell lysate: 20 µL			85-86011
ERK1/2 colorimetric in-cell	Multispecies	Coated ELISA	NA	NA	NA	62206
ERK1/2 near infrared in-cell	Multispecies	Coated ELISA	NA	NA	NA	62211
Erythropoietin (EPO)	Human	Coated ELISA	CCS, plasma, serum: 50 µL	0.17 mIU/mL	1.6–100 mIU/mL	BMS2035
		Coated ELISA	CCS, serum, plasma: 50 µL	0.14 mIU/mL	1.6–100 mIU/mL	BMS2035-2
		ProQuantum	CCS, plasma, serum: 2–5 µL	<1 mIU/mL	1.28–20,000 mIU/mL	A40419

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
E-Selectin (CD62E)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–3,000 pg/mL	EMSELE
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	555.3 pg/mL	0.29–1,200 ng/mL	EPX01A-10205-901
	Human	Coated ELISA	CCS, plasma, serum: 20 µL	0.3 ng/mL	0.8–50 ng/mL	BMS205
		Instant ELISA	CCS, plasma, serum: 20 µL	0.33 ng/mL	1.56–50 ng/mL	BMS205INST
	Monkey	Coated ELISA	CCS, serum: 20 µL	0.4 U/mL	1.9–60 U/mL	BMS649
		Instant ELISA	CCS, plasma, serum: 20 µL	0.6 U/mL	1.88–60 U/mL	BMS649INST
Estradiol (17-beta-estradiol)	Human	Coated ELISA	Plasma, serum: 50 µL	5 pg/mL	10–1,000 pg/mL	KAQ0621
Estrone	Multispecies	Competitive ELISA	Serum, plasma, CCS: 50 µL	22.4 pg/mL	31.2–2,000 pg/mL	EIA17E1
Estrone-3-glucuronide (E1G)	Multispecies	Competitive ELISA	Serum, plasma, CCS: 50 µL	7.38 pg/mL	15.6–1,000 pg/mL	EIA17E3
Estrone-3-sulfate (E1S)	Multispecies	Competitive ELISA	Serum, plasma, CCS: 50 µL	26.4 pg/mL	41–4,000 pg/mL	EIA17E3S
FABP-2 (intestinal)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	25 pg/mL	0.025–100 ng/mL	EHFABP2
FABP-3 (cardiac)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1.5 ng/mL	1.5–200 ng/mL	EHFABP3
FABP-3	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	551.38 pg/mL	146.48–600,000 pg/mL	EPX010-12263-901
		Coated ELISA	CCS, plasma, serum: 50 µL	26.88 pg/mL	156.3–5,000 pg/mL	BMS2263
Factor X	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL			EPX01A-12152-901
FAK (total)	Multispecies	Coated ELISA	Cell lysate: 10 µL	<1.6 ng/mL	1.6–100 ng/mL	KHO0431
FAK [pY397]	Multispecies	Coated ELISA	Cell lysate: 10 µL	<1.0 U/mL	1.6–100 ng/mL	KHO0441
FAP	Human	Coated ELISA	CCS, plasma, serum: 100 µL	12 pg/mL	12–4,000 pg/mL	EHFAP
Fas (APO/CD95)	Human	Coated ELISA	CCS, Serum: 10 µL	13.2 pg/mL	15.6–1,000 pg/mL	BMS245TEN
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	26.61 pg/mL	61.035–250,000 pg/mL	EPX01A-10245-901
Fas-L (CD178)	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	90 pg/mL	90–60,000 pg/mL	ERFASLG
	Human	Coated ELISA	Amniotic fluid, CCS, plasma, serum: 50 µL	0.07 ng/mL	0.16–10 ng/mL	BMS260-2
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.7 pg/mL	2.2–9,000 pg/mL	EPX01A-10260-901
Fc epsilon RI	Human	Coated ELISA	Serum, plasma, CCS: 20 µL	0.14 ng/mL	0.078–5.00 ng/mL	BMS2101
Fc gamma R2B (FcGR2B)	Mouse	Coated ELISA	Plasma, serum: 50 µL; CCS: 100 µL	80 pg/mL	0.08–70 ng/mL	EMFCGR2B
Fc gamma R2BC (FcGR2BC; CD32 B/C)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	85 pg/mL	85–5,000 pg/mL	EHFCGR2B
Ferric antioxidant status (FRAP)	Multispecies	Detection Kit	Serum, plasma, CCS: 20 µL	8.06 µM	31.2–1,000 µM	EIAFECL2
Ferritin	Human	Coated ELISA	CCS, plasma, serum: 100 µL	600 pg/mL	0.6–200 ng/mL	EHFTL
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	132.377 pg/mL	242–991,100 pg/mL	EPX010-12184-901
Fetuin-A	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	57.7 pg/mL	98–400,800 pg/mL	EPX010-12347-901
FETUB (fetuin B)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	4 ng/mL	4–5 ng/mL	EHFETUB
FGF-1 (FGF-alpha; fibroblast growth factor 1 (acidic))	Human	Coated ELISA	CCS, plasma, serum: 100 µL	12 pg/mL	12–4,000 pg/mL	EHFGF1
FGF-2	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–600 pg/mL	EMFGF2
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.47 pg/mL	4.9–20,000 pg/mL	EPX01A-42074-901
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.47 pg/mL	4.9–20,000 pg/mL	EPX01A-12074-901
FGF-4 (for lysates)	Human	Coated ELISA	Cell, tissue lysates: 100 µL	50 pg/mL	50–18,000 pg/mL	EHFGF4CL
FGF-4	Human	Coated ELISA	Plasma, serum: 50 µL; CCS: 100 µL	50 pg/mL	50–18,000 pg/mL	EHFGF4
FGF-6	Human	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–6,000 pg/mL	EHFGF6
FGF-7 (KGF; keratinocyte growth factor)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.5 pg/mL	0.5–400 pg/mL	EHFGF7
FGF-9	Human	Coated ELISA	CCS, plasma, serum: 100 µL	200 pg/mL	200–35,000 pg/mL	EHFGF9
FGF-19	Human	Coated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–8,000 pg/mL	EHFGF19
FGF-21	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5.4 pg/mL	9–35,400 pg/mL	EPX010-12357-901
FGF-23	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		48.83–200,000 pg/mL	EPX010-12204-901
FGF-Basic (bFGF; FGF-2)	Human	Coated ELISA	CCS, plasma, serum: 50 µL	7 pg/mL	15.6–1,000 pg/mL	KHG0021
Fibrinogen	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	350 pg/mL	1.22–5,000 ng/mL	EPX01A-12153-901
Fibronectin	Human	Coated ELISA	Plasma, serum: 10 µL; CCS, urine: 50 µL	0.1 ng/mL	0.31–20 ng/mL	BMS2028
FIGF (VEGF-D; vascular endothelial growth factor D)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.2 ng/mL	0.2–20 ng/mL	EHFIGF
FLT1 (VEGF R1; VEGF receptor 1)	Mouse	Coated ELISA	Serum, plasma: 50 µL; CCS: 100 µL	8 pg/mL	4.14–3,000 pg/mL	EMFLT1

## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
FLT-3L (fms-related tyrosine kinase 3 ligand)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1.5 pg/mL	1.5–400 pg/mL	EHFLT3LG
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.064–25,000 pg/mL	A35581
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.1 pg/mL	2.11–8,650 pg/mL	EPX010-12387-901
	Monkey	Coated ELISA	CCS, plasma, serum: 100 µL	12 pg/mL	12–400 pg/mL	EPFLT3LG
Follistatin	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–5,000 pg/mL	EMFLT3L
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	19.13 pg/mL	19.85–81,300 pg/mL	EPX010-12244-901
Formaldehyde	Multispecies	Detection Kit	Serum, plasma, CCS: 50 µL	0.715 µM	3.1–200 µM	EIAH2O
Fractalkine (CX3CL1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	300 pg/mL	0.3–60 ng/mL	EHCX3CL1
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.005 pg/mL	0.0064–500 pg/mL	A35582
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	300 pg/mL	0.3–200 ng/mL	EMCX3CL1
	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–2,000 pg/mL	ERCX3CL1
		Coated ELISA	Tissue lysates, cell lysates: 100 µL	5 pg/mL	5–2,000 pg/mL	ERCXCL1CL
FST (follistatin)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.5 pg/mL	2.08–8,500 pg/mL	EPX01A-12121-901
FSTL3 (FLRG)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	500 pg/mL	0.5–125 ng/mL	EHFST
Furin	Human	Coated ELISA	CCS, plasma, serum: 100 µL	250 pg/mL	250–50,000 pg/mL	EHFSTL3
Galactose	Multispecies	Detection Kit	Serum, plasma, CCS: 20 µL	0.493 mg/dL	0.78–25 mg/dL	EIAGALC
Galectin-1 (LGALS1)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	12 pg/mL	2–10 fold	EMLGALS1
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–2,000 pg/mL	EMLGALS3
	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–800 pg/mL	ERLGALS3
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	213.9 pg/mL	439.45–1,800,000 pg/mL	EPX01A-10279-901
		Coated ELISA	CCS, plasma, serum: 50 µL	0.29 ng/mL	0.47–30.0 ng/mL	BMS279-4
Galectin-7	Human	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–10,000 pg/mL	EHLGALS7
Galectin-7 (LGAL27)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	65 pg/mL	65–16,000 pg/mL	EMLGALS7
Galectin-9	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.298 pg/mL	2,22–9,100 pg/mL	EPX010-12331-901
GAPDH	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	120 pg/mL	244.14–1,000,000 pg/mL	EPX01A-12154-901
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–5,000 pg/mL	EMGAS6
GAS6	Human	Coated ELISA	CCS, plasma, serum: 50 µL (1:200 prediluted)	0.65 pg/mL	11.7–750 pg/mL	BMS2291
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	45.4 pg/mL	83–338,500 pg/mL	EPX010-12291-901
GCP-2 (CXCL6)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.96 pg/mL	1.06–4,350 pg/mL	EPX010-12386-901
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	0.5 pg/mL	0.5–150 pg/mL	EMCSF3
G-CSF (CSF-3)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	6.4 pg/mL	16.46–67,400 pg/mL	EPX01A-12001-901
		Instant ELISA	CCS, plasma, serum: 50 µL	11 pg/mL	39.1–2,500 pg/mL	BMS2001INST
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.19 pg/mL	1.4–5,850 pg/mL	EPX01A-26034-901
	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	3.7–15,000 pg/mL	EPX01A-36034-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.8 pg/mL	4.44–18,200 pg/mL	EPX01A-42001-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	9.65 pg/mL	12.21–50,000 pg/mL	EPX010-12258-901
GDF-15 (growth differentiation factor 15)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–800 pg/mL	EHGDF15
		Coated ELISA	CCS, plasma, serum: 50 µL (1:20 prediluted)	0.59 pg/mL	2–125 pg/mL	BMS2258
GDNF	Human	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–2,000 pg/mL	EHGDNF
	ProCartaPlex	Serum, plasma, CSF: 25 µL	47,254 pg/mL	58–238,400 pg/mL	EPX010-12340-901	
GFAP	Human	ProCartaPlex	Serum, plasma, CSF: 25 µL	11,528 pg/mL	8–32,900 pg/mL	EPX010-12336-901
	Human	Coated ELISA	Tissue lysates, cell lysates: 100 µL	15 pg/mL	15–10,000 pg/mL	EHTNFRSF18CL
GITR (CD357)	Human	ProCartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	13.36 pg/mL	24.41–100,000 pg/mL	EPX01A-12210-901
	Human	Coated ELISA	CCS, plasma, serum: 25 µL	9.7 pg/mL	62.3–4,000 pg/mL	BMS2210
GITRL	Human	Coated ELISA	CCS, plasma, serum: 100 µL	25 pg/mL	25–10,000 pg/mL	EHTNFSF18
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–1,000 pg/mL	EMTNFSF18
	Human	ProCartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	12.41 pg/mL	54.74–224,200 pg/mL	EPX01A-15902-901
Glucose	Multispecies	Detection Kit	Serum, plasma, CCS: 20 µL	0.413 mg/dL	0.5–32 mg/dL	EIAGLUC
Glutathione	Multispecies	Detection Kit	Serum, plasma, CCS: 50 µL	0.634 µM	0.78–25 µM	EIAGSHC
				45 nM	0.2–25 µM	EIAGSHF
Glutathione reductase	Human	Activity Kit	Serum, plasma, CCS: 25 µL	0.009 mU/mL	0.15–5 mU/mL	EIAGRF
Glutathione S-transferase	Multispecies	Activity Kit	Serum, plasma, CCS: 50 µL	2.70 mU/mL	7.8–500 mU/mL	EIAGSTF

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
GM-CSF (CSF-2)	Human	Porcine	Coated ELISA CCS, plasma, serum: 100 µL	72 pg/mL	72–18,000 pg/mL	ESCSF2
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.2 pg/mL	17.09–70,000 pg/mL	EPX01A-10283-901
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	1.3 pg/mL	1.79–7,330 pg/mL	EPXS010-10283-901
		Uncoated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–750 pg/mL	88-8337
		Coated ELISA	Amniotic fluid, CCS, plasma, serum: 50 µL	2.9 pg/mL	7.8–500 pg/mL	BMS283
	Mouse	Instant ELISA	CCS, plasma, serum: 50 µL	0.6 pg/mL	7.8–500 pg/mL	BMS283INST
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.064–5,000 pg/mL	A42891
		Coated ELISA	CCS, serum: 50 µL	2.0 pg/mL	3.9–250 pg/mL	BMS612
		Uncoated ELISA	CCS, serum: 100 µL	4 pg/mL	4–500 pg/mL	88-7334
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.19 pg/mL	2.4–10,000 pg/mL	EPX01A-20612-901
gp130 (IL-6RB)	Mouse	ProQuantum	CCS, serum, plasma: 2–5 µL	<0.3 pg/mL	0.32–25,000 pg/mL	A46735
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.3 pg/mL	9.8–40,000 pg/mL	EPX01A-30612-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.2 pg/mL	6.37–26,100 pg/mL	EPX01A-40283-901
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.96 pg/mL	14.43–59,100 pg/mL	EPX010-12376-901
Granzyme A	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	23.3 pg/mL	8.54–35,000 pg/mL	EPX010-12232-901
	Human	Coated ELISA CCS, plasma, serum: 50 µL		0.73 pg/mL	7.8–500 pg/mL	BMS2232
	Human	Coated ELISA CCS, serum: 50 µL		0.2 pg/mL	0.66–480 pg/mL	BMS2027
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.4 pg/mL	117.4–120,200 pg/mL	EPX01A-12027-901
Granzyme B	Mouse	Uncoated ELISA	CCS, plasma, serum: 100 µL	40 pg/mL	40–5,000 pg/mL	88-8022
		Coated ELISA	CCS, plasma, serum: 50 µL	1.6 pg/mL	7.8–500 pg/mL	BMS6029
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.3 pg/mL	0.32–25,000 pg/mL	A44238
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.6 pg/mL	117.4–120,200 pg/mL	EPX01A-42027-901
Ghrelin	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		195.31–800,000 pg/mL	EPX010-12192-901
	Human	Coated ELISA CCS, plasma, serum: 25 µL		11.8 pg/mL	15.6–1,000 pg/mL	BMS2192
GLP-1	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		9.76–40,000 pg/mL	EPX010-12194-901
	Human	Coated ELISA CCS, plasma, serum: 50 µL		0.32 pg/mL	0.8–50.0 pg/mL	BMS2194
GLP 7-36a	Human	Coated ELISA CCS, plasma, serum: 100 µL		150 pg/mL	150–20,000 pg/mL	EHGLP
Glucagon (GCG)	Human	Coated ELISA CCS, plasma, serum: 100 µL		2.5 pg/mL	2.5–130 pg/mL	EHGCG
GREM2 (PRDC)	Mouse	Coated ELISA CCS, plasma, serum: 100 µL		3 pg/mL	3–800 pg/mL	EMGREM2
GRN (progranulin)	Mouse	Coated ELISA CCS, plasma, serum: 100 µL		20 pg/mL	20–15,000 pg/mL	EMGRN
GRO alpha (KC/CINC1/CXCL1)	Mouse	Coated ELISA CCS, plasma, serum: 100 µL			300 pg/mL in assay diluent D and 50 pg/mL in assay diluent B	EMCXCL1
		Rat	Coated ELISA CCS, plasma, serum: 100 µL		300–15,000 pg/mL	ERCXCL1
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.8 pg/mL	2.44–10,000 pg/mL	EPX01A-12122-901
		Coated ELISA	CCS, plasma, serum: 50 µL	7.6 pg/mL	16–1,000 pg/mL	BMS2122
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.01 pg/mL	0.0128–1,000 pg/mL	A42896
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.05 pg/mL	1.7–7,000 pg/mL	EPX01A-26031-901
	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.4 pg/mL	11.4–46,500 pg/mL	EPX01A-36031-901
Growth stimulation-expressed protein ST2	Human	Coated ELISA	Serum, plasma, CCS: 50 µL	30.5 pg/mL	31.25–2,000 pg/mL	EHIAST2
HAVCR1 (TIM-1)	Human	Coated ELISA	Plasma, serum: 50 µL; CCS: 100 µL	2 pg/mL	2–3,000 pg/mL	EHHAVCR1
HAVCR1 (TIM-1)	Mouse	Coated ELISA	Plasma, serum: 50 µL; CCS: 100 µL	30 pg/mL	30–8,000 pg/mL	EMHAVCR1
HAVCR1 (TIM-1)	Rat	Coated ELISA	Plasma, serum: 50 µL; CCS: 100 µL	10 pg/mL	10–3,000 pg/mL	ERHAVCR1
HB-EGF	Human	Coated ELISA CCS, plasma, serum: 100 µL		20 pg/mL	20–4,000 pg/mL	EHHBEGF
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.16 pg/mL	1.28–5,250 pg/mL	EPX010-12245-901
hCG (chorionic gonadotropin)	Human	Coated ELISA CCS, plasma, serum: 100 µL		50 pg/mL	50–40,000 pg/mL	EHCG
HER-2	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.8 pg/mL	10.81–44,300 pg/mL	EPX01A-10207-901
		Coated ELISA	Plasma, serum: 50 µL; CCS: 100 µL	0.03 ng/mL	0.04–2.50 ng/mL	BMS207-2
HER3 (ERBB3)	Human	Coated ELISA CCS, plasma, serum: 100 µL		4 pg/mL	4–2,500 pg/mL	EHERBB3
HGF	Hemoglobin	Multispecies Detection Kit	Serum, plasma, CCS: 10 µL	0.021 g/dL	0.25–16 g/dL	EIAHGB
		Human	Coated ELISA CCS, plasma, serum: 50 µL	<20 pg/mL	125–8,000 pg/mL	KAC2211
		Mouse	Coated ELISA CCS, plasma, serum: 100 µL	400 pg/mL	0.4–60 ng/mL	EMHGF
	Human	Coated ELISA Tissue lysates, cell lysates: 100 µL		400 pg/mL	0.4–60 ng/mL	EMHGFCL
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.1 pg/mL	8.79–36,000 pg/mL	EPX01A-12069-901
	Instant ELISA	CCS, plasma, serum: 50 µL		5.5 pg/mL	63–4,000 pg/mL	BMS2069INST

## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
hGH (human growth hormone)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–600 pg/mL	EHGH1
hGH (human growth hormone)	Human	Coated ELISA	Plasma, serum: 50 µL	0.17 pIU/mL	0.45–98 pIU/mL	KAQ1081
HIF-1 alpha	Human	Coated ELISA	CCS, plasma, serum: 50 µL	<30 pg/mL	81.92–20,000 pg/mL	EHIF1A
Histone demethylase	Human	Activity Kit	Serum, plasma, CCS: 100 µL	0.128 µM	0.128–0.64 µM	EIAHDMF
HSP27 (HSPB1)	Human	Coated ELISA	CCS, cell lysate, plasma, serum: 10 µL	10.9 pg/mL	15.6–1,000 pg/mL	BMS2086
HSP60	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	107.049 pg/mL	120–491,000 pg/mL	EPX010-12323-901
HSP70 (HSPA4)	Human	Coated ELISA	CCS, Cell lysate, plasma, serum: 50 µL	0.052 ng/mL	0.156–10 ng/mL	BMS2087
HSP90 alpha	Human	Coated ELISA	100 µL (1:25 prediluted)	0.03 ng/mL	0.156–10 ng/mL	BMS2090
HTRA2 (OMI)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	200 pg/mL	0.2–50 ng/mL	EHHTRA2
HVEM (CD270; TNFRSF14)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.49 pg/mL	24.41–100,000 pg/mL	EPX01A-12218-901
		Coated ELISA	CCS, plasma, serum: 50 µL	7.89 pg/mL	31.25–2,000 pg/mL	BMS2218
I-309 (CCL1)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.167 pg/mL	0.73–3,000 pg/mL	EPX010-12377-901
ICAM-1	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–7,000 pg/mL	ERICAM1
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	76.3 pg/mL	151.85–622,000 pg/mL	EPX01A-10201-901
	Human	Coated ELISA	CCS, plasma, serum: 10 µL	2.2 ng/mL	6.25–100 ng/mL	BMS201
		Instant ELISA	Amniotic fluid, bile, CCS, plasma, serum, urine: 10 µL	2.17 ng/mL	1.56–100 ng/mL	BMS201INST
	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	3.98–16,300 pg/mL	EPX01A-36048-901
		Coated ELISA	CCS, serum: 10 µL	1.1 U/mL	6.3–100 U/mL	BMS648
	NHP	Instant ELISA	CCS, plasma, serum: 25 µL	1.05 U/mL	1.56–100 U/mL	BMS648INST
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.4 pg/mL	83.23–340,900 pg/mL	EPX01A-40201-901
ICAM-2	Human	Coated ELISA	Amniotic fluid, CCS, urine, whole blood: 100 µL; Plasma, serum: 15 µL	0.3 U/mL	0.75–24 U/mL	BMS236
ICAM-3	Human	Coated ELISA	Amniotic fluid, CCS, plasma, serum, urine: 20 µL	0.38 ng/mL	0.78–50 ng/mL	BMS218
ICOS ligand (B7-H2)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5.48 pg/mL	9.03–37,000 pg/mL	EPX010-12325-901
IDO	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.2 pg/mL	4.88–20,000 pg/mL	EPX01A-12213-901
IFN-alpha		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	0.61–2,500 pg/mL	EPX01A-10216-901
	Human	Coated ELISA	CCS, plasma, serum: 20 µL	3.2 pg/mL	7.8–500 pg/mL	BMS216
		Instant ELISA	CCS, plasma, serum: 20 µL	3.3 pg/mL	39–2,500 pg/mL	BMS216INST
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.05 pg/mL	0.064–5,000 pg/mL	A42897
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.03 pg/mL	5.6–22,800 pg/mL	EPX01A-26027-901
	Mouse	Coated ELISA	CCS, plasma, serum: 50 µL	7.48 pg/mL	31.3–2,000 pg/mL	BMS6027
		ProQuantum	CCS, serum, plasma: 2–5 µL	<1 pg/mL	1.6–25,000 pg/mL	A46736
	Porcine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.008 pg/mL	0.8–3,300 pg/mL	EPX01A-66046-901
IFN-beta	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	1.41–5,800 pg/mL	EPX01A-40216-901
	Human	Coated ELISA	CCS: 50 µL	50 pg/mL	50–4,000 pg/mL	414101
	Mouse	Coated ELISA	CCS: 100 µL	<15.6 pg/mL	15.6–1,000 pg/mL	424001
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		6.10–25,000 pg/mL	EPX01B-26044-901
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.68 pg/mL	8.54–35,000 pg/mL	EPX01A-12088-901

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
IFN-gamma	Bovine	Semi-quantitative coated plate	CCS, plasma: 100 µL	Semi-quantitative	Semiquantitative	KBC1231
		Uncoated ELISA	CCS, plasma, serum: 100 µL	<31.3 pg/mL	31.2–2,000 pg/mL	ESS0026B
	Canine	Coated ELISA	CCS, plasma, serum: 100 µL	0.1 ng/mL	0.1–25 ng/mL	ECIFNG
	Chicken	Uncoated ELISA	CCS, plasma: 100 µL	<15.6 pg/mL	15.6–1,000 pg/mL	CAC1233
	Porcine	Uncoated ELISA	CCS, plasma: 100 µL	<15.6 pg/mL	15.6–1,000 pg/mL	CSC4033
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.075 pg/mL	0.31–1,250 pg/mL	EPXS010-10228-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	12.21–50,000 pg/mL	EPX01A-10228-901
		Coated ELISA	CCS, plasma, serum: 50 µL	0.99 pg/mL	1.6–100 pg/mL	BMS228
	Human	HS Coated ELISA	CCS, plasma, serum: 50 µL	0.06 pg/mL	0.16–10 pg/mL	BMS228HS
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.01 pg/mL	0.0128–5,000 pg/mL	A35576
		Uncoated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–500 pg/mL	88-7316
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.09 pg/mL	1.2–5,000 pg/mL	EPX01A-20606-901
	Mouse	ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.024 pg/mL	0.06–260 pg/mL	EPXS010-20606-901
		Coated ELISA	CCS, serum: 50 µL	5.3 pg/mL	15.6–1,000 pg/mL	BMS606
		HS Coated ELISA	CCS, plasma, serum: 20 µL	0.09 pg/mL	0.63–40 pg/mL	BMS609
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.064–10,000 pg/mL	A41150
	Rat	Uncoated ELISA	CCS, plasma, serum: 100 µL	0.7 pg/mL	0.7–100 pg/mL	88-8314
		Instant ELISA	CCS, plasma, serum: 50 µL	4 pg/mL	15.6–1,000 pg/mL	BMS606INST
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.6 pg/mL	9.8–40,000 pg/mL	EPX01A-30621-901
		Coated ELISA	CCS, serum: 50 µL	9.9 pg/mL	31.3–2,000 pg/mL	BMS621
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5.6 pg/mL	1.02–4,200 pg/mL	EPX01A-40228-901
	Canine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.1 pg/mL	6.37–26,100 pg/mL	EPX01A-50501-901
	Porcine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.245 pg/mL	4.98–20,400 pg/mL	EPX01A-66047-901
IFN-omega	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.6 pg/mL	5.49–22,500 pg/mL	EPX01A-10233-901
		Coated ELISA	CCS, plasma, serum: 25 µL	1.5 pg/mL	4.7–300 pg/mL	BMS233
IgA	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	1.5 ng/mL	1.5–500 ng/mL	EMIGA
	Human	Uncoated ELISA	Plasma, serum: 10 µL	1.6 ng/mL	1.6–100 ng/mL	88-50600
		Coated ELISA	Plasma, serum: 20 µL	0.03 ng/mL	1.6–100 ng/mL	BMS2096
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.1 ng/mL	0.128–2,000 ng/mL	A45729
	Mouse	Uncoated ELISA	CCS, plasma, serum: 10 µL	0.39 ng/mL	0.39–25 ng/mL	88-50450
	Rat	Uncoated ELISA	Plasma, serum: 10 µL; CCS: 50 µL	16 ng/mL	16–1,000 ng/mL	88-50480
IgE	Human	Uncoated ELISA	CCS, plasma, serum: 10 µL	7.8 ng/mL	7.8–500 ng/mL	88-50610
		Coated ELISA	Plasma, serum: 10 µL	0.5 ng/mL	7.8–500 ng/mL	BMS2097
		ProQuantum	CCS, serum, plasma: 2–5 µL	<10 pg/mL	192–3,000,000 pg/mL	A46690
	Mouse	Uncoated ELISA	CCS: 400 µL	4 ng/mL	4–250 ng/mL	88-50640-22
		Coated ELISA	Plasma, serum: 2 µL; CCS: 100 µL	0.14 ng/mL	0.14–100 ng/mL	EMIGHE
IGF-1 (insulin-like growth factor 1)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–2,000 pg/mL	EMIGF1
IGF-1	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–7,500 pg/mL	ERIGF1
IGF-1R	Human	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–6,000 pg/mL	EHIGF1R
IGF-2	Mouse	Coated ELISA	CCS: 100 µL	1,500 pg/mL	1.5–150 ng/mL	EMIGF2
IGFBP-1 (insulin-like growth factor binding protein 1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–2,000 pg/mL	EHIGFBP1
IGFBP-2	Human	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–6,000 pg/mL	EHIGFBP2
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	600 pg/mL	0.6–600 ng/mL	EMIGFBP2
IGFBP-3	Human	Coated ELISA	CCS, plasma, serum: 100 µL	80 pg/mL	80–18,000 pg/mL	EHIGFBP3
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	70 pg/mL	70–40,000 pg/mL	EMIGFBP3
IGFBP-4	Human	Coated ELISA	CCS, plasma, serum: 100 µL	250 pg/mL	0.25–100 ng/mL	EHIGFBP4

## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
IGFBP-5	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 ng/mL	2–800 ng/mL	EHIGFBP5
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–3,000 pg/mL	EMIGFBP5
	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	25 pg/mL	25–7,000 pg/mL	ERIGFBP5
IGFBP-6	Human	Coated ELISA	CCS, plasma, serum: 100 µL	150 pg/mL	150–60,000 pg/mL	EHIGFBP6
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–6,000 pg/mL	EMIGFBP6
IgG subclass	Human	Uncoated ELISA	Serum: 10 µL			991000
IgG total	Human	Uncoated ELISA	Plasma, serum: 10 µL	1.6 ng/mL	1.6–100 ng/mL	88-50550
		Coated ELISA	Plasma, serum: 10 µL	0.24 ng/mL	1.6–100 ng/mL	BMS2091
	Mouse	Uncoated ELISA	CCS: 50 µL; plasma, serum: 10 µL	1.56 ng/mL	1.56–100 ng/mL	88-50400
	Rat	Uncoated ELISA	CCS, plasma, serum: 10 µL	1.6 ng/mL	1.6–100 ng/mL	88-50490
IgG1	Human	Uncoated ELISA	Plasma, serum: 10 µL	0.16 ng/mL	0.16–10 ng/mL	88-50560
		Coated ELISA	Plasma, serum: 10 µL	0.32 ng/mL	15.6–1,000 ng/mL	BMS2092
	Mouse	Uncoated ELISA	CCS: 50 µL; plasma, serum: 10 µL	3.13 ng/mL	3.13–200 ng/mL	88-50410
	Rat	Uncoated ELISA	CCS: 50 µL; plasma, serum: 10 µL	6.25 ng/mL	6.25–400 ng/mL	88-50500
IgG2	Human	Uncoated ELISA	Plasma, serum: 10 µL	0.63 ng/mL	0.63–40 ng/mL	88-50570
		Coated ELISA	Plasma, serum: 20 µL	0.25 ng/mL	1.2–75 ng/mL	BMS2093
IgG2a	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	0.6 ng/mL	0.6–150 ng/mL	EMIGG2A
	Mouse	Uncoated ELISA	CCS: 100 µL; plasma, serum: 10 µL	3.9 ng/mL	3.90–250 ng/mL	88-50420
	Rat	Uncoated ELISA	CCS, plasma, serum: 10 µL	0.39 ng/mL	0.39–25 ng/mL	88-50510
IgG2b	Mouse	Uncoated ELISA	CCS: 50 µL; plasma, serum: 10 µL	3.9 ng/mL	3.90–250 ng/mL	88-50430
	Rat	Uncoated ELISA	CCS, plasma, serum: 10 µL	2 ng/mL	2–125 ng/mL	88-50520
IgG2c	Mouse	Uncoated ELISA	CCS: 50 µL; plasma, serum: 10 µL	0.39 ng/mL	0.39–25 ng/mL	88-50670
IgG3	Human	Uncoated ELISA	Plasma, serum: 10 µL	4.7 ng/mL	4.7–300 ng/mL	88-50580
		Coated ELISA	Plasma, serum: 10 µL	0.21 ng/mL	4.7–300 ng/mL	BMS2094
	Mouse	Uncoated ELISA	50 µL (1:10,000 prediluted)	1.875 ng/mL	1.875–125 ng/mL	88-50440
IgG4	Human	Uncoated ELISA	CCS, plasma, serum: 10 µL	46.9 ng/mL	46.9–3,000 ng/mL	88-50590
		Coated ELISA	Plasma, serum: 20 µL	0.1 ng/mL	9.4–600 ng/mL	BMS2095
		ProQuantum	CCS, serum, plasma: 2–5 µL	<50 pg/mL	0.08–1,250 ng/mL	A45247
IgM	Human	Uncoated ELISA	CCS, plasma, serum: 10 µL	15.6 ng/mL	15.6–1,000 ng/mL	88-50620
		Coated ELISA	CCS, plasma, serum: 10 µL	1 ng/mL	15.6–1,000 ng/mL	BMS2098
		ProQuantum	CCS, serum, plasma: 2–5 µL	<10 pg/mL	16–250,000 pg/mL	A45249
	Mouse	Uncoated ELISA	CCS: 50 µL; plasma, serum: 10 µL	0.39 ng/mL	0.39–25 ng/mL	88-50470
	Rat	Uncoated ELISA	CCS, plasma, serum: 10 µL	0.3125 ng/mL	0.31–20 ng/mL	88-50540
IR (total)	Human	Coated ELISA	Cell lysate: 10 µL	0.5 ng/mL	0.94–60 ng/mL	KHR9111
IR [pY1158]	Multispecies	Coated ELISA	Cell lysate: 10 µL	<0.8 U/mL	0–100 U/mL	KHR9121
IR [pYpY1162/1163]	Multispecies	Coated ELISA	Cell lysate: 10 µL	<0.8 U/mL	0–100 U/mL	KHR9131
IR [pY1334]	Multispecies	Coated ELISA	Cell lysate: 10 µL	<1 U/mL	0–100 U/mL	KHR9161
IRS1 [pS312]	Multispecies	Coated ELISA	Cell lysate: 10 µL	<1 U/mL	0–100 U/mL	KHO0521

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.	
IL-1 alpha	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	0.61–2,500 pg/mL	EPX01A-10243-901	
		Coated ELISA	CCS, plasma, serum, urine: 50 µL	1.1 pg/mL	1.6–100 pg/mL	BMS243-2	
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.064–5,000 pg/mL	A35592	
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.32 pg/mL	3.5–14,300 pg/mL	EPX01A-20611-901	
		Uncoated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–500 pg/mL	88-5019	
		Coated ELISA	Supernatant, serum: 50 µL	4 pg/mL	7.8–500 pg/mL	BMS611	
	Rat	ProQuantum	CCS, plasma, serum: 2–5 µL	<0.3 pg/mL	0.32–5,000 pg/mL	A42894	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.5 pg/mL	12.2–50,000 pg/mL	EPX01A-30611-901	
		Coated ELISA	CCS, serum: 50 µL	4 pg/mL	15.6–1,000 pg/mL	BMS627	
IL-1 beta	Bovine	Uncoated ELISA	CCS, serum: 100 µL	Undetermined	31–2,000 pg/mL	ESS0027	
		Coated ELISA	Plasma, serum: 50 µL; CCS: 100 µL	10 pg/mL	10–8,000 pg/mL	ECIL1B	
		Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–6,000 pg/mL	ESIL1B	
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	2.44–10,000 pg/mL	EPX01A-10224-901	
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.145 pg/mL	0.32–1,330 pg/mL	EPXS010-10224-901	
		Coated ELISA	CCS, plasma, serum, urine: 50 µL	0.3 pg/mL	3.9–250 pg/mL	BMS224-2	
		Instant ELISA	CCS, plasma, serum: 50 µL	0.7 pg/mL	7.8–500 pg/mL	BMS224INST	
		HS Coated ELISA	CCS, plasma, serum, urine: 50 µL	0.05 pg/mL	0.16–10 pg/mL	BMS224HS	
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.064–10,000 pg/mL	A35574	
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.14 pg/mL	1.2–5,000 pg/mL	EPX01A-26002-901	
		Uncoated ELISA	CCS, cell lysate, plasma, serum: 100 µL	25 pg/mL	25–3,000 pg/mL	88-8014-22	
		Coated ELISA	CCS, serum: 50 µL	1.2 pg/mL	7.8–500 pg/mL	BMS6002	
		Instant ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3.9–250 pg/mL	BMS6002INST	
	Rat	Uncoated ELISA	CCS: 100 µL	39 pg/mL	39–5,000 pg/mL	88-6010-22	
		Coated ELISA	CCS, serum: 50 µL	4 pg/mL	31.3–2,000 pg/mL	BMS630	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.1 pg/mL	15.9–65,000 pg/mL	EPX01A-36002-901	
		NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	0.95–3,900 pg/mL	EPX01A-40224-901
		Porcine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.092 pg/mL	3.73–15,300 pg/mL	EPX01A-66048-901
IL-1R1 (IL-1RA; IL-1 receptor type 1)	Monkey	Coated ELISA	CCS, plasma, serum: 50 µL	0.3 pg/mL	3.9–250 pg/mL	BMS645-2	
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–2,000 pg/mL	EHIL1R1	
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–3,000 pg/mL	EHIL1R2	
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–1,200 pg/mL	EHIL1RL1	
	Equine	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–3,000 pg/mL	EEIL1RN	
IL-1RA (IL1RN)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	17.8 pg/mL	34.18–140,000 pg/mL	EPX01A-12080-901	
	Human	Coated ELISA	CCS, plasma, serum: 50 µL	30 pg/mL	109–7,000 pg/mL	BMS2080	
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	17.8 pg/mL	114.8–470,200 pg/mL	EPX01A-42080-901	

## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.	
IL-2	Bovine	Coated ELISA	CCS, plasma, serum: 100 µL	0.2 ng/mL	0.2–200 ng/mL	EBIL2	
	Equine	Coated ELISA	CCS, plasma, serum: 100 µL	0.2 ng/mL	0.2–160 pg/mL	EEIL2	
	Human	Coated ELISA	CCS, plasma, serum, urine: 50 µL	<6 pg/mL	38.4–1,500 pg/mL	EH2IL2	
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.8 pg/mL	4.88–20,000 pg/mL	EPX01A-10221-901	
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.199 pg/mL	0.44–1,820 pg/mL	EPXS010-10221-901	
		Uncoated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–250 pg/mL	88-7025	
		Coated ELISA	CCS, plasma, serum: 50 µL	9.1 pg/mL	18.8–1,200 pg/mL	BMS221-2	
		Instant ELISA	Amniotic fluid, CCS, plasma, serum, synovial fluid urine: 50 µL	2.3 pg/mL	18.8–1,200 pg/mL	BMS221INST	
	Mouse	HS Coated ELISA	CCS, plasma, serum: 50 µL	0.4 pg/mL	0.94–60 pg/mL	BMS221HS	
		ProQuantum HS	CCS, plasma, serum: 2–5 µL	<0.01 pg/mL	0.0128–5,000 pg/mL	A35603	
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.168 pg/mL	0.12–490 pg/mL	EPXS010-20601-901	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.10 pg/mL	1.2–5,000 pg/mL	EPX01A-20601-901	
		Uncoated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–200 pg/mL	88-7024	
IL-2R (CD25)	Mouse	Coated ELISA	CCS, serum: 50 µL	5.3 pg/mL	15.6–1,000 pg/mL	BMS601	
		HS Coated ELISA	CCS, plasma, serum: 50 µL	0.05 pg/mL	0.78–50 pg/mL	BMS601HS	
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.064–5,000 pg/mL	A42892	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.9 pg/mL	4.9–20,000 pg/mL	EPX01A-36052-901	
		Coated ELISA	CCS, serum: 50 µL	11 pg/mL	62.5–2,000 pg/mL	BMS634	
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.05 pg/mL	0.46–1,900 pg/mL	EPX01A-40221-901	
		Monkey	Coated ELISA	CCS, plasma, serum, urine, amniotic fluid, whole blood: 50 µL	9.1 pg/mL	18.8–1,200 pg/mL	BMS643-2
		Canine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1 pg/mL	7.32–30,000 pg/mL	EPX01A-50504-901
		Human	Coated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–4,000 pg/mL	EHIL2RA
		Coated ELISA	CCS, plasma, serum: 50 µL	0.27 ng/mL	0.31–20 ng/mL	BMS212-2	
IL-3	Human	Instant ELISA	CCS, plasma, serum, urine: 10 µL	0.21 ng/mL	0.31–20 ng/mL	BMS212INST	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	14 pg/mL	122.07–500,000 pg/mL	EPX01A-10212-901	
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	5.2–21,300 pg/mL	EPX01A-20212-901	
	IL-2RA (IL-2 receptor subunit alpha)	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	5.2–21,300 pg/mL	EPX01A-20212-901
	IL-2RA (IL-2 receptor subunit alpha)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–4,000 pg/mL	EHIL2RA
	IL-2RB (IL-2 receptor subunit beta)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	22 pg/mL	22–6,000 pg/mL	EHIL2RB
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	<1 pg/mL	7.8–500 pg/mL	KHC0031	
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.01 pg/mL	0.0128–5,000 pg/mL	A35586	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	10.1 pg/mL	25.76–105,500 pg/mL	EPX01A-12123-901	
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	0.2 pg/mL	0.2–40 pg/mL	EMIL3	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.11 pg/mL	0.4–1,700 pg/mL	EPX01A-26035-901	

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.	
IL-4	Bovine	Uncoated ELISA	CCS, serum: 100 µL	<15.6 pg/mL	15.6–1,000 pg/mL	ESS0031	
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.237 pg/mL	0.86–3,530 pg/mL	EPXS010-10225-901	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.5 pg/mL	12.21–50,000 pg/mL	EPX01A-10225-901	
		Uncoated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–200 pg/mL	88-7046	
		Coated ELISA	CCS, plasma, serum: 50 µL	1.3 pg/mL	7.8–500 pg/mL	BMS225-2	
		Instant ELISA	Amniotic fluid, CCS, plasma, serum, synovial fluid urine: 50 µL	0.66 pg/mL	7.8–500 pg/mL	BMS225INST	
	Human	HS Coated ELISA	CCS, plasma, serum: 50 µL	0.1 pg/mL	0.25–16 pg/mL	BMS225HS	
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.01 pg/mL	0.0128–5,000 pg/mL	A35587	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.03 pg/mL	1.2–5,000 pg/mL	EPX01A-20613-901	
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.055 pg/mL	0.14–560 pg/mL	EPXS010-20613-901	
		Uncoated ELISA	CCS, serum: 100 µL	4 pg/mL	4–500 pg/mL	88-7044	
		Coated ELISA	CCS, serum: 50 µL	2 pg/mL	3.9–250 pg/mL	BMS613	
	Mouse	Instant ELISA	CCS, serum: 50 µL	0.6 pg/mL	3.9–250 pg/mL	BMS613INST	
		HS Coated ELISA	CCS, plasma, serum: 50 µL	0.32 pg/mL	0.63–40 pg/mL	BMS613HS	
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.3 pg/mL	0.32–5,000 pg/mL	A42893	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	1.2–5,000 pg/mL	EPX01A-30613-901	
		Coated ELISA	CCS, serum: 50 µL	0.2 pg/mL	1.6–100 pg/mL	BMS628	
		NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.8 pg/mL	8.76–35,900 pg/mL	EPX01A-40225-901
	Porcine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.072 pg/mL	1.44–5,900 pg/mL	EPX01A-66050-901	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	7.32–30,000 pg/mL	EPX01A-10278-901	
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	1.1 pg/mL	0.664–2,720 pg/mL	EPXS010-10278-901	
		Uncoated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–500 pg/mL	88-7056	
		Coated ELISA	CCS, serum: 50 µL	1.5 pg/mL	7.8–500 pg/mL	BMS278	
		Instant ELISA	CCS, plasma, serum: 50 µL	1.45 pg/mL	7.8–500 pg/mL	BMS278INST	
IL-5	Human	ProQuantum	CCS, plasma, serum: 2–5 µL	<0.01 pg/mL	0.0128–5,000 pg/mL	A35588	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.32 pg/mL	2.4–10,000 pg/mL	EPX01A-20610-901	
		Uncoated ELISA	CCS, lavage fluid, serum: 100 µL	4 pg/mL	4–500 pg/mL	88-7054	
		Coated ELISA	CCS, serum: 50 µL	3.3 pg/mL	7.8–500 pg/mL	BMS610	
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.3 pg/mL	0.32–5,000 pg/mL	A44836	
		Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	2.4–10,000 pg/mL	EPX01A-30610-901
	Mouse	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	10.35–42,400 pg/mL	EPX01A-40278-901
		IL-5RA (IL-5 receptor subunit alpha; CD125)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	150 pg/mL	0.15–40 ng/mL

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## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
IL-6	Bovine	Uncoated ELISA	CCS, serum: 100 µL	<78.1 pg/mL	78–5,000 pg/mL	ESS0029
	Canine	Coated ELISA	CCS, plasma, serum: 100 µL	0.1 ng/mL	0.1–25 ng/mL	ECIL6
	Porcine	Coated ELISA	CCS, plasma, serum: 100 µL	45 pg/mL	45–10,000 pg/mL	ESIL6
	Rat	Uncoated ELISA	CCS, plasma, serum: 100 µL	31.2 pg/mL	31.2–2,000 pg/mL	CRC0063
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.4 pg/mL	9.77–40,000 pg/mL	EPX01A-10213-901
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.038 pg/mL	1.03–4,230 pg/mL	EPXS010-10213-901
	Mouse	Uncoated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–200 pg/mL	88-7066
		Coated ELISA	CCS, plasma, serum: 50 µL	0.92 pg/mL	1.56–100 pg/mL	BMS213-2
		Instant ELISA	CCS, serum: 50 µL	0.92 pg/mL	3.1–200 pg/mL	BMS213INST
		HS Coated ELISA	CCS, plasma, serum: 50 µL	0.03 pg/mL	0.8–5 pg/mL	BMS213HS
	Rat	ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.064–10,000 pg/mL	A35573
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.21 pg/mL	4.9–20,000 pg/mL	EPX01A-20603-901
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.066 pg/mL	0.70–2,850 pg/mL	EPXS010-20603-901
	Monkey	Uncoated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–500 pg/mL	88-7064
		Coated ELISA	CCS, plasma, serum: 50 µL	6.5 pg/mL	31.3–2,000 pg/mL	BMS603-2
		HS Coated ELISA	CCS, plasma, serum: 50 µL	0.21 pg/mL	1.56–100 pg/mL	BMS603HS
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.3 pg/mL	0.32–5,000 pg/mL	A43656
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.9 pg/mL	4.9–20,000 pg/mL	EPX01A-36053-901
		Coated ELISA	CCS, serum: 50 µL	12 pg/mL	31–2,000 pg/mL	BMS625
	Canine	Coated ELISA	CCS, serum: 50 µL	1.3 U/mL	1.9–120 U/mL	BMS641-2
		Instant ELISA	CCS, serum: 50 µL	1.05 U/mL	1.9–120 U/mL	BMS641INST
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.4 pg/mL	4.028–16,500 pg/mL	EPX01A-40213-901
	Porcine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1 pg/mL	12.13–49,700 pg/mL	EPX01A-50505-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.428 pg/mL	7.6–31,400 pg/mL	EPX01A-66051-901
IL-6R (CD126)	Human	Coated ELISA	Amniotic fluid, CCS, urine: 20 µL; plasma, serum: 10 µL	0.01 ng/mL	0.8–5 ng/mL	BMS214
		Instant ELISA	Amniotic fluid, CCS, plasma, serum, urine: 10 µL	0.01 ng/mL	78–5,000 pg/mL	BMS214INST
IL-6RA (IL-6 receptor subunit alpha)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–1,500 pg/mL	EMIL6RA
IL-6ST (gp130; IL-6 receptor subunit beta)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–6,000 pg/mL	EHIL6ST
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	40 pg/mL	40–10,000 pg/mL	EMIL6ST
IL-7	Human	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–1,000 pg/mL	EHIL7
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–6,000 pg/mL	EMIL7
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	0.61–2,500 pg/mL	EPX01B-10237-901
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	7.59–31,100 pg/mL	EPX01A-26094-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	0.89–3,650 pg/mL	EPX01A-40237-901
IL-7R alpha	Human	ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.064–5,000 pg/mL	A35589
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.2 pg/mL	8–32,800 pg/mL	EPX01A-26093-901

Over 4,500 references—visit our kit product pages or contact our Technical Support team at [techsupport@thermofisher.com](mailto:techsupport@thermofisher.com) for informative and valuable citations.

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
IL-8 (CXCL8)	Canine	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–1,500 pg/mL	ECCXCL8
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	6.9 pg/mL	10.08–41,300 pg/mL	EPX01A-50506-901
	Feline	Coated ELISA	CCS, plasma, serum: 100 µL	25 pg/mL	25–6,000 pg/mL	EFCXCL8
		HS Coated ELISA	CCS, plasma, serum: 100 µL	<0.1 pg/mL	0.39–25 pg/mL	KHC0084
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	0.217–890 pg/mL	EPXS010-10204-901
	Human	ProQuantum	CCS, plasma, serum: 2–5 µL	<0.01 pg/mL	0.0128–5,000 pg/mL	A35575
		Uncoated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–250 pg/mL	88-8086
		Coated ELISA	Amniotic fluid, CCS, plasma, serum: 50 µL	2 pg/mL	15.6–1,000 pg/mL	BMS204-3
	Monkey	Instant ELISA	Amniotic fluid, CCS, plasma, serum: 50 µL	1.3 pg/mL	15.6–1,000 pg/mL	BMS204-3INST
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.2 pg/mL	2.44–10,000 pg/mL	EPX01A-10204-901
	NHP	Coated ELISA	CCS, serum: 50 µL	3.0 U/mL	19.5–1,250 U/mL	BMS640-3
		Instant ELISA	Amniotic fluid, CCS, plasma, serum: 50 µL	1.5 U/mL	19.5–1,250 U/mL	BMS640-3INST
	Porcine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.2 pg/mL	3.19–13,100 pg/mL	EPX01A-40204-901
		Coated ELISA	Serum: 50 µL; CCS: 100 µL	<10 pg/mL	31.2–2,000 pg/mL	KSC0081
IL-9	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.5 pg/mL	15.77–64,600 pg/mL	EPX01A-66052-901
		Uncoated ELISA	CCS, plasma, serum: 50 µL	1 pg/mL	9.77–40,000 pg/mL	EPX01A-12081-901
		Coated ELISA	CCS, plasma, serum: 100 µL	0.5 pg/mL	1–100 pg/mL	88-7958
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.28 pg/mL	3.1–200 pg/mL	BMS2081
		Uncoated ELISA	CCS, serum: 100 µL	32 pg/mL	3.1–75,000 pg/mL	EPX01A-26041-901
		Coated ELISA	CCS, plasma, serum: 50 µL	32 pg/mL	32–4,000 pg/mL	88-8092
IL-10	Canine	Coated ELISA	CCS, plasma, serum: 100 µL	0.1 ng/mL	0.1–80 ng/mL	ECIL10
		Equine	CCS, plasma, serum: 100 µL	90 pg/mL	0.09–25 ng/mL	EEIL10
	Porcine	Coated ELISA	Serum, plasma: 50 µL; CCS: 100 µL	<3 pg/mL	7.8–500 pg/mL	KSC0101
		Uncoated ELISA	CCS, plasma, serum: 100 µL	31.2 pg/mL	31.2–2,000 pg/mL	CSC0103
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	2.44–10,000 pg/mL	EPX01A-10215-901
	Human	ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.038 pg/mL	0.18–750 pg/mL	EPXS010-10215-901
		Uncoated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	3.1–200 pg/mL	88-7106
		Coated ELISA	CCS, plasma, serum: 50 µL	1 pg/mL	2–300 pg/mL	BMS215-2
		Instant ELISA	CCS, plasma, serum: 50 µL	0.66 pg/mL	3.1–200 pg/mL	BMS215INST
		HS Coated ELISA	CCS, plasma, serum: 50 µL	0.05 pg/mL	0.39–25 pg/mL	BMS215HS
	Mouse	ProQuantum	CCS, serum, plasma: 2–5 µL	<0.05 pg/mL	0.064–5,000 pg/mL	A35590
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.69 pg/mL	2.4–10,000 pg/mL	EPX01A-20614-901
		Uncoated ELISA	CCS, serum: 100 µL	32 pg/mL	2–300 pg/mL	88-7105
	Rat	Instant ELISA	CCS, plasma, serum: 50 µL	5.28 pg/mL	39.1–2,500 pg/mL	BMS614INST
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.6 pg/mL	9.8–40,000 pg/mL	EPX01A-36049-901
IL-10Ra (CD210a)	Monkey	Coated ELISA	CCS, serum: 50 µL	1.5 pg/mL	15.6–1,000 pg/mL	BMS629
		Instant ELISA	CCS, plasma, serum: 50 µL	1.3 U/mL	3.9–250 U/mL	BMS642-2
	NHP	Coated ELISA	CCS, serum: 50 µL	1.32 U/mL	3.9–250 U/mL	BMS642INST
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	0.75–3,100 pg/mL	EPX01A-40642-901
	Canine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.7 pg/mL	8.59–35,200 pg/mL	EPX01A-50502-901
		Porcine	ProcartaPlex	1.25 pg/mL	3.75–15,400 pg/mL	EPX01A-66049-901
IL-10Rb	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2.5 ng/mL	2.5–500 ng/mL	EHIL10RA
IL-11	Human	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–3,000 pg/mL	EHIL10RB
IL-11	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–800 pg/mL	EHIL11
		Coated ELISA	CCS, plasma, serum: 100 µL	1,000 pg/mL	1–450 ng/mL	EMIL11

## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.	
IL-12/IL-23 p40	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	1.81–7,400 pg/mL	EPX01A-12090-901	
		Coated ELISA	CCS, serum, plasma: 50 µL	<10 pg/mL	31.3–2,000 pg/mL	BMS2013	
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.064–10,000 pg/mL	A35577	
	Mouse	Uncoated ELISA	CCS, serum: 100 µL	2 pg/mL	2–300 pg/mL	88-7120	
		Coated ELISA	CCS, serum: 50 µL	4 pg/mL	31.3–2,000 pg/mL	BMS616	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.5 pg/mL	4–16,200 pg/mL	EPX01A-26033-901	
	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.6 pg/mL	4.05–16,600 pg/mL	EPX01A-36050-901	
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	1.81–7,400 pg/mL	EPX01A-42090-901	
	Canine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.8 pg/mL	6.62–27,100 pg/mL	EPX01A-50503-901	
	Porcine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.46 pg/mL	45.14–184,900 pg/mL	EPX01A-62090-901	
IL-12 p70	Human	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	<2.5 pg/mL	7.8–500 pg/mL	KRC2371
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.04 pg/mL	6.84–28,000 pg/mL	EPX01A-10238-901	
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.044 pg/mL	0.75–3,090 pg/mL	EPXS010-10238-901	
		Uncoated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–500 pg/mL	88-7126	
		Coated ELISA	CCS, plasma, serum: 50 µL	2.1 pg/mL	3.1–200 pg/mL	BMS238	
	Mouse	HS Coated ELISA	CCS, plasma, serum: 50 µL	0.1 pg/mL	0.16–10 pg/mL	BMS238HS	
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.01 pg/mL	0.0128–5,000 pg/mL	A35591	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.21 pg/mL	2.4–10,000 pg/mL	EPX01A-26004-901	
		Uncoated ELISA	CCS, serum: 100 µL	15 pg/mL	15–2,000 pg/mL	88-7121	
		Coated ELISA	CCS, serum: 50 µL	10.0 pg/mL	15.6–1,000 pg/mL	BMS6004	
IL-12 (IL-12A)	Monkey	Coated ELISA	CCS, serum: 50 µL	2.6 U/mL	3.9–250 U/mL	BMS646	
	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5.9 pg/mL	9.8–40,000 pg/mL	EPX01A-36004-901	
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.04 pg/mL	1.5–6,150 pg/mL	EPX01A-40238-901	
	Porcine	Coated ELISA	CCS, plasma, serum: 100 µL	2.2 ng/mL	2.2–600 ng/mL	ESIL12A	
	IL-12 p40/70 (IL-12B)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–2,000 pg/mL	EMIL12B
	IL-12 (total)	Rat	Coated ELISA	CCS: 100 µL; plasma, serum: 10 µL	<3 pg/mL	15.6–1,000 pg/mL	KRC0121
	Porcine	Coated ELISA	CCS, plasma, serum: 100 µL	16 pg/mL	16–15,000 pg/mL	ESIL13	
	Rat	Coated ELISA	Tissue lysates, cell lysates: 100 µL	20 pg/mL	20–20,000 pg/mL	ERIL13	
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	2.44–10,000 pg/mL	EPX01A-10231-901	
		Uncoated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–500 pg/mL	88-7439	
		Coated ELISA	Amniotic fluid, CCS, plasma, serum: 50 µL	2.8 pg/mL	7.8–500 pg/mL	BMS231-3	
		Instant ELISA	CCS, plasma, serum: 50 µL	0.99 pg/mL	3.13–200 pg/mL	BMS231INST	
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.064–5,000 pg/mL	A35609	
IL-13	Mouse	Coated ELISA	CCS, plasma, serum: 50 µL	2.8 pg/mL	7.8–500 pg/mL	BMS6015	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.16 pg/mL	2.4–10,000 pg/mL	EPX01A-26015-901	
		Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	4.9–20,000 pg/mL	EPX01A-36015-901
		NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	1.57–6,450 pg/mL	EPX01A-40231-901
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.4 ng/mL	0.4–100 ng/mL	EHIL13RA2	
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.1 pg/mL	3.05–12,500 pg/mL	EPX01A-12089-901	
		Coated ELISA	CCS, plasma, serum: 50 µL	3.4 pg/mL	15.6–1,000 pg/mL	BMS2106	
		Uncoated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–2,500 pg/mL	88-7620	
		NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.1 pg/mL	3.54–14,500 pg/mL	EPX01A-42089-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.42 pg/mL	2.0–8,050 pg/mL	EPX01A-26023-901	
IL-15/IL-15R	Mouse	Uncoated ELISA	CCS, serum: 100 µL	4 pg/mL	4–500 pg/mL	88-7215	
		Coated ELISA	CCS, plasma, serum: 50 µL	2 pg/mL	6.3–400 pg/mL	BMS6023	
IL-16	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.7 pg/mL	15.45–63,300 pg/mL	EPX01A-12162-901	

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
IL-17A (IL-17/CTLA-8)	Human	Uncoated ELISA	CCS, serum: 100 µL	4 pg/mL	4–500 pg/mL	88-7176
		Coated ELISA	CCS, plasma, serum: 50 µL	0.5 pg/mL	1.6–100 pg/mL	BMS2017
		HS Coated ELISA	CCS, plasma, serum: 50 µL	0.01 pg/mL	0.23–15 pg/mL	BMS2017HS
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	2.44–10,000 pg/mL	EPX01A-12017-901
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.016 pg/mL	0.25–1,030 pg/mL	EPXS010-12017-901
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.3 pg/mL	0.32–25,000 pg/mL	A35611
	Mouse	Uncoated ELISA	CCS, serum: 100 µL	4 pg/mL	4–500 pg/mL	88-7371
		Coated ELISA	CCS, serum: 50 µL	1.6 pg/mL	7.8–500 pg/mL	BMS6001
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.08 pg/mL	1.2–5,000 pg/mL	EPX01A-26001-901
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.3 pg/mL	0.32–25,000 pg/mL	A46737
	Rat	Uncoated ELISA	CCS, serum: 100 µL	2 pg/mL	2–200 pg/mL	88-7170
		Coated ELISA	CCS, plasma, serum: 50 µL	1 pg/mL	1.6–100 pg/mL	BMS635
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	3.7–15,000 pg/mL	EPX01A-30635-901
	Porcine	Coated ELISA	CCS, plasma, serum: 100 µL	14 pg/mL	14–4,000 pg/mL	ESIL17A
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.4 pg/mL	6.98–28,600 pg/mL	EPX01A-42017-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.55 pg/mL	6.1–25,000 pg/mL	EPX01A-12082-901
IL-17AF	Human	Uncoated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–4,000 pg/mL	88-7117
		Coated ELISA	CCS, plasma, serum: 50 µL	8.8 pg/mL	31.3–2,000 pg/mL	BMS2082
	Mouse	Uncoated ELISA	CCS, serum: 50 µL	30 pg/mL	30–4,000 pg/mL	88-8711
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.3 ng/mL	0.3–100 ng/mL	EHIL17B
IL-17B	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	12 pg/mL	12–12,000 pg/mL	EMIL17B
IL-17E (IL-25)	Mouse	Uncoated ELISA	CCS: 100 µL; Serum: 12.5 µL	16 pg/mL	16–2,000 pg/mL	88-7002
		Coated ELISA	CCS, plasma, serum: 50 µL	0.9 pg/mL	3.9–250 pg/mL	BMS6046
IL-17F	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	2.05–8,400 pg/mL	EPX01A-12160-901
		Uncoated ELISA	CCS, plasma, serum: 100 µL	16 pg/mL	16–2,000 pg/mL	88-7478
		Coated ELISA	CCS, plasma, serum: 50 µL	15.5 pg/mL	62.5–4,000 pg/mL	BMS2037-2
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.01 pg/mL	0.0128–5,000 pg/mL	A35612
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.13 pg/mL	2.4–10,000 pg/mL	EPX01A-26020-901
		Uncoated ELISA	CCS, serum: 100 µL	15 pg/mL	15–2,000 pg/mL	88-7472
		Coated ELISA	CCS, plasma, serum: 50 µL	10 pg/mL	62.5–4,000 pg/mL	BMS6020
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	2.05–8,400 pg/mL	EPX01A-42160-901
IL-17R	Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–3,000 pg/mL	EHIL17R
IL-18	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	<4 pg/mL	15.6–1,000 pg/mL	KRC2341
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.4 pg/mL	9.77–40,000 pg/mL	EPX01A-10267-901
		Coated ELISA	CCS, plasma, serum: 50 µL	9 pg/mL	78–5,000 pg/mL	BMS267-2
		Instant ELISA	CCS, plasma, serum, urine: 50 µL	9.2 pg/mL	78–5,000 pg/mL	BMS267INST
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.05 pg/mL	0.064–1,000 pg/mL	A35613
	Mouse	Coated ELISA	CCS, plasma, serum: 50 µL	10 pg/mL	31.3–2,000 pg/mL	BMS618-3
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	9.95 pg/mL	36.6–150,000 pg/mL	EPX01A-20618-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.4 pg/mL	1.95–8,000 pg/mL	EPX01A-40267-901
	Porcine	Coated ELISA	CCS, serum: 50 µL	23 pg/mL	39.1–2,500 pg/mL	BMS672
IL-18BP (IL-18 binding protein)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–18,000 pg/mL	EHIL18BP
IL-18RB (IL18RAP)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	12 pg/mL	12–3,000 pg/mL	EHIL18RAP
IL-19	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		32.6–133,500 pg/mL	EPX01A-26048-901
	Mouse	Uncoated ELISA	CCS, plasma, serum: 10 µL	62.5 pg/mL	62.5–4,000 pg/mL	88-50320
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1 pg/mL	1–500 pg/mL	EHIL20
IL-20	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	16 pg/mL	16–4,000 pg/mL	EMIL20
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.6 pg/mL	12.26–50,200 pg/mL	EPX01A-12168-901

## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.	
IL-21	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.6 pg/mL	9.77–40,000 pg/mL	EPX01A-12043-901	
		Uncoated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–1,000 pg/mL	88-8218	
		Coated ELISA	CCS, plasma, serum: 50 µL	20 pg/mL	78–5,000 pg/mL	BMS2043	
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.3 pg/mL	0.32–25,000 pg/mL	A35593	
	Mouse	Uncoated ELISA	CCS, serum: 100 µL	8 pg/mL	8–1,000 pg/mL	88-8210	
		Coated ELISA	CCS, plasma, serum: 50 µL	5 pg/mL	16.1–1,000 pg/mL	BMS6021	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.5 pg/mL	8.81–36,100 pg/mL	EPX01A-26021-901	
	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	1.71–7,000 pg/mL	EPX010-36021-901	
IL-22	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	8.2 pg/mL	31.74–130,000 pg/mL	EPX01B-12047-901	
		Uncoated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–1,000 pg/mL	88-7522	
		Coated ELISA	CCS, plasma, serum: 50 µL	5 pg/mL	31.3–2,000 pg/mL	BMS2047	
	Mouse	Uncoated ELISA	CCS, serum: 100 µL	8 pg/mL	8–1,000 pg/mL	88-7422	
		Coated ELISA	CCS, plasma, serum: 50 µL	5 pg/mL	7.8–500 pg/mL	BMS6022	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.24 pg/mL	12.2–50,000 pg/mL	EPX01A-26022-901	
IL-23 (heterodimer) (IL12B/IL23A)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.9 pg/mL	14.65–60,000 pg/mL	EPX01A-12023-901	
		Uncoated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–2,000 pg/mL	88-7237	
		Coated ELISA	CCS, plasma, serum: 50 µL	4 pg/mL	15.6–2,000 pg/mL	BMS2023-3	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.21 pg/mL	12.2–50,000 pg/mL	EPX01A-26017-901	
	Mouse	Uncoated ELISA	CCS, serum: 100 µL	8 pg/mL	8–1,000 pg/mL	88-7230	
		Coated ELISA	CCS, plasma, serum: 50 µL	16 pg/mL	31.3–2,000 pg/mL	BMS6017	
		NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.9 pg/mL	6.71–27,500 pg/mL	EPX01A-42023-901
		Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		4.6–19,100 pg/mL	EPX01A-26046-901
IL-25 (IL-17E)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5.1 pg/mL	24.41–100,000 pg/mL	EPX01A-12085-901	
		Coated ELISA	CCS, plasma, serum: 50 µL	9.5 pg/mL	62.5–4,000 pg/mL	BMS2085	
		Uncoated ELISA	CCS, Serum: 100 µL	16 pg/mL	16–2,000 pg/mL	88-7274	
	Mouse	Coated ELISA	CCS, plasma, serum: 50 µL	8.76 pg/mL	31.3–2,000 pg/mL	BMS6024	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.34 pg/mL	2.4–10,000 pg/mL	EPX01A-26024-901	
IL-28A (IFN lambda 2)	Human	Uncoated ELISA	CCS, plasma, serum: 50 µL	15.6 pg/mL	15.6–1,000 pg/mL	88-52102	
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	20.31 pg/mL	41–168,000 pg/mL	EPX01A-26028-901	
		Coated ELISA	CCS, plasma, serum: 50 µL	12.85 pg/mL	31.3–2,000 pg/mL	BMS6028	
IL-28A	Human	Coated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–10,000 pg/mL	EHIL28A	
IL-28B (IFN lambda 3)	Mouse	Uncoated ELISA	CCS, serum: 100 µL	32 pg/mL	32–4,000 pg/mL	88-7284	
IL-29 (IFN lambda 1)	Human	Uncoated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–1,000 pg/mL	88-7296	
		Coated ELISA	CCS, serum, plasma: 50 µL	2 pg/mL	15.6–1,000 pg/mL	BMS2049	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	28.3 pg/mL	51.83–212,300 pg/mL	EPX01A-12049-901	
IL-31	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.3 pg/mL	19.53–80,000 pg/mL	EPX01A-12041-901	
		Coated ELISA	CCS, plasma, serum: 50 µL	1 pg/mL	7.8–500 pg/mL	BMS2041	
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.45 pg/mL	7.6–31,200 pg/mL	EPX01A-26030-901	
		Coated ELISA	CCS, serum, plasma: 50 µL	9.1 pg/mL	15.65–1,000 pg/mL	BMS6030	
IL-33	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.24 pg/mL	2.29–9,400 pg/mL	EPX01A-12048-901	
		Coated ELISA	CCS, serum, plasma: 50 µL	0.2 pg/mL	7.8–500 pg/mL	BMS2048	
	Mouse	Uncoated ELISA	CCS, serum: 100 µL	25 pg/mL	25–3,000 pg/mL	88-7333	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	25.5 pg/mL	21.75–89,100 pg/mL	EPX010-26025-901	
IL-33R (ST2)	Human	Coated ELISA	CCS, serum, plasma: 50 µL	11.2 pg/mL	46.9–3,000 pg/mL	BMS6025	
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	66.7 pg/mL	122.07–500,000 pg/mL	EPX010-12231-901	
IL-34	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5.5 pg/mL	10–40,000 pg/mL	EPX010-12342-901	
IL-36G (IL-1F9)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	13 pg/mL	13–3,000 pg/mL	EHIL36G	
IL-37 (FIL1/IL-1F7)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.99 pg/mL	4.22–17,300 pg/mL	EPX010-12268-901	
		Uncoated ELISA	CCS, plasma, serum: 50 µL	31.3 pg/mL	31.3–2,000 pg/mL	88-52103	

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
Insulin	Human	Coated ELISA	Serum: 50 µL	0.17 U/mL	5.1–250 U/mL	KAQ1251
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	5 pIU/mL	5–400 pIU/mL	EMINS
	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	5 pIU/mL	5–300 pIU/mL	ERINS
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		195.31–800,000 pg/mL	EPX010-12003-901
IP-10 (CXCL10/CRG-2)	Human	Coated ELISA	CCS, saliva, serum, plasma: 50 µL	<2 pg/mL	7.8–500 pg/mL	KAC2361
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	1.95–8,000 pg/mL	EPX01A-10284-901
	Human	Instant ELISA	Amniotic fluid, CCS, serum, synovial fluid, plasma, urine: 10 µL	1 pg/mL	3.1–200 pg/mL	BMS284INST
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.064–10,000 pg/mL	A35578
	Mouse	Coated ELISA	CCS, plasma, serum: 50 µL	6.5 pg/mL	7.8–500 pg/mL	BMS6018
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.26 pg/mL	0.5–2,000 pg/mL	EPX01A-26018-901
	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.9 pg/mL	4.9–20,100 pg/mL	EPX01A-30636-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	10.54–43,200 pg/mL	EPX01A-40284-901
Iso-insulin	Human	Instant ELISA	CCS, plasma, serum: 50 µL	16.6 pg/mL	31.3–2,000 pg/mL	BMS2003INST
I-TAC (CXCL11)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–600 pg/mL	EHCXCL11
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–4,000 pg/mL	EMCXCL11
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.6 pg/mL	5.37–22,000 pg/mL	EPX01A-12124-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.8 pg/mL	5.63–23,100 pg/mL	EPX01A-42124-901
JNK 1/2 (total/phospho)	Multispecies	InstantOne ELISA	Cell lysate: 20 µL			85-86198
JNK 1/2 [pThr183/Tyr185]	Multispecies	InstantOne ELISA	Cell lysate: 20 µL			85-86197
JNK 1/2 (total)	Multispecies	InstantOne ELISA	Cell lysate: 20 µL			85-86196
JAK2 (total)	Human	Coated ELISA	Cell lysate: 10 µL	<0.95 ng/mL	0.95–60 ng/mL	KHO5521
JAK2 [pYpY1007/1008]	Human	Coated ELISA	Cell lysate: 10 µL	1.5 U/mL	0–100 U/mL	KHO5621
Kallikrein-6 (KLK6)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.6 pg/mL	6–22,800 pg/mL	EPX010-12355-901
KLK10	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 ng/mL	2–600 ng/mL	EHKLK10
KLK14	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1.5 pg/mL	1.5–500 pg/mL	EHKLK14
KLK6	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.6 ng/mL	0.6–150 ng/mL	EHKLK6
KRT18	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	698.9 pg/mL	345.48–1,415,100 pg/mL	EPX010-12247-901
Lactoferrin	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	324.02 pg/mL	94.29–386,200 pg/mL	EPX010-12250-901
LAG-3 (CD223)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.37 pg/mL	12.21–50,000 pg/mL	EPX01A-12211-901
	Human	Coated ELISA	CCS, plasma, serum: 10 µL	2.20 pg/mL	6.2–400 pg/mL	BMS2211
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	72.6 pg/mL	73–298,900 pg/mL	EPX010-26051-901
LAP (TGF beta 1)	Human	Uncoated ELISA	CCS, plasma, serum: 10 µL	156.3 pg/mL	156.3–10,000 pg/mL	88-50390
		Coated ELISA	CCS, plasma, serum: 10 µL	0.098 ng/mL	0.16–10 ng/mL	BMS2065
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.96 ng/mL	3,052–12,500 pg/mL	EPX010-12065-901
		ProQuantum	CCS, serum, plasma: 2–5 µL	<15 pg/mL	16–250,000 pg/mL	A45730
	Mouse	Uncoated ELISA	CCS, plasma, serum: 10 µL	0.2 ng/mL	0.2–12.5 ng/mL	88-50690
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.03 ng/mL	0.32–2,500 ng/mL	A46342
LDH-B	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1,775.02 pg/mL	662.01–2,711,600 pg/mL	EPX010-12262-901
Leptin	Human	Coated ELISA	Plasma, serum: 10 µL; CCS: 100 µL	<3.5 pg/mL	15.6–1,000 pg/mL	KAC2281
	Mouse	Coated ELISA	Plasma, serum: 10 µL; CCS: 100 µL	<50 pg/mL	93.8–6,000 pg/mL	KMC2281
	Rat	Coated ELISA	Plasma, serum: 20 µL; CCS: 100 µL	<20 pg/mL	62.5–4,000 pg/mL	KRC2281
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.0 pg/mL	19.31–79,100 pg/mL	EPX01A-12039-901
	Human	Instant ELISA	50 µL (1:25 prediluted)	20.0 pg/mL	63–4,000 pg/mL	BMS2039INST
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.3 pg/mL	0.32–25,000 pg/mL	A45250
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1 pg/mL	7.15–29,300 pg/mL	EPX01A-26036-901
	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.4 pg/mL	16.92–69,300 pg/mL	EPX01A-32039-901
Leukotriene B4 (LTB4)	Multispecies	Coated ELISA	CCS, urine: 100 µL; plasma: 50 µL; saliva: 25 µL	<19.4 pg/mL	47–12,000 pg/mL	EHLTB4
Levonorgestrel (LNG)	Multispecies	Competitive ELISA	Serum, plasma, CCS: 100 µL	2.2 pg/mL	6.25–200 pg/mL	EIALNGC
LH (luteinizing hormone)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	140 pg/mL	140–10,000 pg/mL	EHLH
LIF	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.83 pg/mL	6.1–25,000 pg/mL	EPX01A-10242-901
	Human	Coated ELISA	CCS, plasma, serum: 50 µL	0.7 pg/mL	3.15–200 pg/mL	BMS242
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.28 pg/mL	2.4–9,850 pg/mL	EPX01A-26040-901
LIGHT (CD258)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–6,000 pg/mL	EHTNFSF14
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.31 pg/mL	2.09–8,550 pg/mL	EPX01A-12009-901

## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
LIMP-II (SCARB2)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–2,500 pg/mL	EHSCARB2
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–1,000 pg/mL	EHLCN2
Lipocalin-2 (LCN2)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	0.02 ng/mL	0.02–100 ng/mL	EMLCN2
	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–8,000 pg/mL	ERLCN2
LOX-1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–500 pg/mL	EHOLR1
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.7 pg/mL	1.2–5,100 pg/mL	EPX010-12296-901
Lp-PLA2	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.665 pg/mL	12–50,000 pg/mL	EPX010-12324-901
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	35 pg/mL	35–10,000 pg/mL	EMSELL
L-selectin (CD62L)	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–6,000 pg/mL	ERSELL
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	10.5 pg/mL	6.62–150,000 pg/mL	EPX01A-10206-901
L-selectin (CD62L)	Human	Coated ELISA	50 µL (1:100 prediluted)	0.2 ng/mL	0.4–25 ng/mL	BMS206
		Instant ELISA	50 µL (1:100 prediluted)	0.19 ng/mL	0.39–25 ng/mL	BMS206INST
Lymphotactin XCL1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	150 pg/mL	0.15–50 ng/mL	EHXCL1
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	40 pg/mL	40–3,000 pg/mL	EMXCL1
		Coated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–2,000 pg/mL	EHLYVE1
LYVE-1	Human	Uncoated ELISA	CCS, plasma, serum: 50 µL (1:150 prediluted)	1.09 pg/mL	1.09–70.0 pg/mL	88-52239-22
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	6.31 pg/mL	10.60–43,400 pg/mL	EPX010-12239-901
mAB Isotyping	Mouse	Coated ELISA	CCS, ascites	3 ng/mL		37503
Mast cell protease-1 (MCPT-1)	Mouse	Uncoated ELISA	CCS, serum: 100 µL	120 pg/mL	120–15,000 pg/mL	88-7503
MBL (MBL2)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.03 ng/mL	0.03–25 ng/mL	EHMBL2
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	52.81 pg/mL	71.22–291,700 pg/mL	EPX010-12284-901
MBL oligomer	Human	Coated ELISA	Plasma, serum: 10 µL	<0.1 ng/mL	0.4–40 ng/mL	KIT029
MCP-1 (CCL2)	Human	Uncoated ELISA	CCS, plasma, serum: 100 µL	7 pg/mL	7–1,000 pg/mL	88-7399
		Coated ELISA	Amniotic fluid, CCS, plasma, serum: 20 µL	2.3 pg/mL	15.6–1,000 pg/mL	BMS281
		Instant ELISA	Amniotic fluid, CCS, plasma, serum: 20 µL	2.3 pg/mL	15.6–1,000 pg/mL	BMS281INST
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.6 pg/mL	1.22–5,000 pg/mL	EPX01B-10281-901
		ProcartaPlex	High Sensitivity	0.7 pg/mL	0.159–650 pg/mL	EPXS010-10281-901
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.064–5,000 pg/mL	A35598
	Mouse	Uncoated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–2,000 pg/mL	88-7391
		Coated ELISA	CCS, serum: 50 µL	2.2 pg/mL	15.6–1,000 pg/mL	BMS6005
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.43 pg/mL	7.3–30,000 pg/mL	EPX01A-26005-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	10.9 pg/mL	18.3–75,000 pg/mL	EPX01A-36005-901
MCP-2 (CCL8)	Rat	Instant ELISA	CCS, serum, plasma: 25 µL	4.7 pg/mL	7.8–500 pg/mL	BMS631INST
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.6 pg/mL	3.76–15,400 pg/mL	EPX01B-40281-901
	Canine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.7 pg/mL	6.23–25,500 pg/mL	EPX01A-50507-901
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	0.49–2,000 pg/mL	EPX01A-12169-901
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.01 pg/mL	0.0128–5,000 pg/mL	A35599
MCP-3 (CCL7)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1 pg/mL	3.9–15,800 pg/mL	EPX01A-12125-901
		Uncoated ELISA	CCS, plasma, serum: 50 µL	0.3125 pg/mL	0.3125–20 pg/mL	88-50700
		Coated ELISA	CCS, plasma, serum: 50 µL	0.1 pg/mL	0.3–20 pg/mL	BMS2125
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.064–5,000 pg/mL	A35600
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.15 pg/mL	0.2–1,000 pg/mL	EPX01A-26006-901
		Instant ELISA	CCS, plasma, serum: 50 µL	2.6 pg/mL	15.6–1,000 pg/mL	BMS6006INST
	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.1 pg/mL	3.5–14,200 pg/mL	EPX01A-36006-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1 pg/mL	3.9–15,800 pg/mL	EPX01A-42125-901
MCP-4 (CCL13)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.688 pg/mL	0.85–3,500 pg/mL	EPX010-12378-901
MCP-5 (CCL12)	Mouse	Instant ELISA	CCS, plasma, serum: 50 µL	2.3 pg/mL	15.6–1,000 pg/mL	BMS6007INST
M-CSF	Human	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–2,000 pg/mL	EHCSF1
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	1 pg/mL	1–350 pg/mL	EMCSF1
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	7 pg/mL	16.72–68,500 pg/mL	EPX01A-12126-901
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.02 pg/mL	0.3–1,100 pg/mL	EPX01A-26039-901
MDC (CCL22)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–600 pg/mL	EMCCL22
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.28 pg/mL	12.42–50,900 pg/mL	EPX01A-10282-901
		ProQuantum	CCS, plasma, serum: 2–5 µL	<1.5 pg/mL	1.6–25,000 pg/mL	A42895

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
Mer (MERTK)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.15 ng/mL	0.15–40 ng/mL	EHMER
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	121.2 pg/mL	171–174,700 pg/mL	EPX010-12285-901
MFG-E8	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	1 pg/mL	1–600 pg/mL	EMMFGE8
		Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–10,000 pg/mL	EHMICA
MICA	Human	Coated ELISA	CCS, plasma, serum: 20 µL	1.09 pg/mL	1.6–100 pg/mL	BMS2302
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	7.77 pg/mL	12.96–53,100 pg/mL	EPX010-12302-901
MICB	Human	Coated ELISA	CCS, plasma, serum: 100 µL	75 pg/mL	0.075–50 ng/mL	EHMICB
		Coated ELISA	CCS, plasma, serum: 50 µL	1.24 pg/mL	3–200 pg/mL	BMS2303
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	6.55 pg/mL	7.32–30,000 pg/mL	EPX010-12303-901
MIF	Human	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–6,000 pg/mL	EHMIF
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.06 pg/mL	0.4–1,600 pg/mL	EPX01A-12127-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.06 pg/mL	0.4–1,600 pg/mL	EPX01A-42127-901
MIG (CXCL9)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–6,000 pg/mL	EHCXCL9
		Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–2,000 pg/mL	EMCXCL9
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5.7 pg/mL	16–63,600 pg/mL	EPX010-26061-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.36 pg/mL	22.2–91,100 pg/mL	EPX01A-10285-901
MIP-1 alpha (CCL3)	Human	Instant ELISA	CCS, serum: 50 µL	4 pg/mL	31.3–2,000 pg/mL	BMS285INST
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.36 pg/mL	6.12–25,100 pg/mL	EPX01A-40285-901
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.1 pg/mL	2.14–8,750 pg/mL	EPX01A-12029-901
		Instant ELISA	CCS, plasma, serum: 50 µL	6 pg/mL	15.6–1,000 pg/mL	BMS2029INST
	Mouse	ProQuantum	CCS, serum, plasma: 2–5 µL	<0.6 pg/mL	0.64–10,000 pg/mL	A35616
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.13 pg/mL	0.5–2,000 pg/mL	EPX01A-26013-901
		Uncoated ELISA	CCS, plasma, serum: 50 µL	0.8 pg/mL	0.8–50 pg/mL	88-56013
MIP-1 beta (CCL4)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1 pg/mL	2.3–9,500 pg/mL	EPX01A-36013-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.1 pg/mL	6.03–24,700 pg/mL	EPX01A-42029-901
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.7 pg/mL	6.1–25,000 pg/mL	EPX01A-12030-901
		Instant ELISA	CCS, plasma, serum: 50 µL	3 pg/mL	7.8–500 pg/mL	BMS2030INST
	Mouse	ProQuantum	CCS, plasma, serum: 2–5 µL	<0.05 pg/mL	0.064–5,000 pg/mL	A35597
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.32 pg/mL	0.81–3,300 pg/mL	EPX010-12382-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.16 pg/mL	1.2–5,000 pg/mL	EPX01A-26014-901
MIP-2 alpha (CXCL2)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.7 pg/mL	22,045–90,300 pg/mL	EPX01A-42030-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.32 pg/mL	0.81–3,300 pg/mL	EPX010-12382-901
	Rat	Coated ELISA	Plasma, serum: 50 µL; CCS: 100 µL	<1 pg/mL	10–640 pg/mL	KRC1021
		Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–2,000 pg/mL	EMCXCL2
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.37 pg/mL	0.7–3,000 pg/mL	EPX01A-26032-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	0.6–2,400 pg/mL	EPX01A-36054-901
MIP-3 beta (CCL19)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5.426 pg/mL	10.89–44,600 pg/mL	EPX010-12380-901
MIP-3 alpha (CCL20)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.2 pg/mL	1.95–8,000 pg/mL	EPX01A-12128-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5.426 pg/mL	10.89–44,600 pg/mL	EPX010-12380-901
MMP-1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–18,000 pg/mL	EHMMMP1
		Coated ELISA	Tissue lysates, cell lysates: 100 µL	8 pg/mL	8–18,000 pg/mL	EHMMMP1CL
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.04 pg/mL	7.84–32,100 pg/mL	EPX01A-12129-901
MMP-2	Human	Coated ELISA	CCS, plasma, serum: 50 µL	<1 ng/mL	0.78–50 ng/mL	KHC3082
MMP-3	Human	Coated ELISA	CCS, plasma, serum: 10 µL	0.0005 ng/mL	0.06–4 ng/mL	BMS2014-3
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.6 pg/mL	17.97–73,600 pg/mL	EPX01A-12014-901
MMP-7	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.04 pg/mL	7.37–30,200 pg/mL	EPX01A-12133-901
MMP-8	Human	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–6,000 pg/mL	EHMMMP8
		Coated ELISA	CCS, plasma, serum: 100 µL	50 pg/mL	0.05–40 ng/mL	ERMMMP8
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	8 pg/mL	25.17–103,100 pg/mL	EPX01A-12134-901
MMP-9	Human	Coated ELISA	CCS, plasma, serum: 10 µL	0.05 ng/mL	0.23–15 ng/mL	BMS2016-2
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	0.83–3,400 pg/mL	EPX01A-12016-901
MMP-10	Human	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–1,500 pg/mL	EHMMMP10
MMP-12	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.4 pg/mL	4.30–17,600 pg/mL	EPX01A-12130-901
MMP-13	Human	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–6,000 pg/mL	EHMMMP13
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.1 pg/mL	5.76–23,600 pg/mL	EPX01A-12131-901
MSP (MST1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–2,000 pg/mL	EHMST1
MPIF (CCL23)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	20.789 pg/mL	21.8–89,300 pg/mL	EPX010-12385-901
Mucin 1 (CA15-3)	Human	Coated ELISA	Plasma, serum: 3.3 µL; CCS: 100 µL	4 mU/mL	4.1–1,000 mU/mL	EHMUC1
Mucin 16 (CA125)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.6 U/mL	0.6–400 U/mL	EHMUC16

## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
Myeloperoxidase (MPO)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	600 pg/mL	0.6–150 ng/mL	EMMPO
	Human	Instant ELISA	CCS, plasma, serum: 10 µL	0.03 ng/mL	0.16–10 ng/mL	BMS2038INST
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	11.9 pg/mL	122.07–500,000 pg/mL	EPX01A-12038-901
Myoglobin	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	635.70 pg/mL	2,610.55–2,673,200 pg/mL	EPX010-12259-901
		Coated ELISA	Serum, plasma, CCS: 10 µL	0.039 ng/mL	0.39–25 ng/mL	BMS2259
N-CAM1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.5 pg/mL	0.5–150 ng/mL	EHN CAM1
		ProcartaPlex	Serum, plasma, CSF: 25 µL	31.3 pg/mL	54–221,900 pg/mL	EPX010-12354-901
Nectin-2	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	19.06 pg/mL	37.30–152,800 pg/mL	EPX010-12304-901
Neprilysin (MME)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.4 ng/mL	0.4–100 ng/mL	EHMME
Neurofilament heavy (NF-H)	Human	ProcartaPlex	Serum, plasma, CSF: 25 µL	18.149 pg/mL	36–145,900 pg/mL	EPX010-12337-901
Neurogranin (NRGN)	Human	ProcartaPlex	Serum, plasma, CSF: 25 µL	5.6 pg/mL	10–41,600 pg/mL	EPX010-12352-901
NF kappaB p65 (total/phospho)	Human	InstantOne ELISA	Cell lysate: 20 µL			85-86083
NF kappaB p65 [pSer536]	Human	InstantOne ELISA	Cell lysate: 20 µL			85-86082
NF kappaB p65 (total)	Human	InstantOne ELISA	Cell lysate: 20 µL			85-86081
NGAL	Human	Coated ELISA	CCS, plasma, serum, tissue homogenate, urine: 10 µL	<2 pg/mL	4–1,000 pg/mL	KIT036
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		4.98–20,400 pg/mL	EPX01A-12202-901
	Human	Coated ELISA	CCS, plasma, serum: 10 µL	6.5 pg/mL	7.80–500 pg/mL	BMS2202
NGF beta (beta-NGF)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	14 pg/mL	14–5,000 pg/mL	EHNGF
	Rat	Coated ELISA	Tissue lysates, cell lysates: 100 µL	15 pg/mL	15–15,000 pg/mL	ERNGFCL
	Rat	Coated ELISA	Plasma, serum: 50 µL; CCS: 100 µL	15 pg/mL	15–15,000 pg/mL	ERNGF
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	6.19 pg/mL	7.32–30,000 pg/mL	EPX01A-12117-901
	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	11.5 pg/mL	5.05–20,700 pg/mL	EPX01A-32117-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	6.19 pg/mL	7.32–30,000 pg/mL	EPX01A-42117-901
	Canine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.9 pg/mL	3.91–16,000 pg/mL	EPX01A-52117-901
NGFR	Human	Coated ELISA	CCS, plasma, serum: 100 µL	80 pg/mL	80 pg/mL–20 ng/mL	EHNGFR
Nidogen-1 (NID1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	100 pg/mL	0.1–30 ng/mL	EHNID1
Nitric oxide (total)	Multispecies	Coated ELISA	Serum, plasma, urine, saliva: 50 µL	1.35 µM	3.1–100 µM	EMSNOTOT
Nitric oxide	Multispecies	Coated ELISA	Serum, plasma, urine, saliva: 50 µL	0.222 µM nitrite; 0.625 µM nitrate	0–100 µM	EMSNO
NOTCH-1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–7,000 pg/mL	EHN NOTCH1
NOV	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–30 ng/mL	EHNOV
NPPB (BNP)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	14 pg/mL	14–1,000 pg/mL	EHNPPB
NrCAM	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.3 ng/mL	0.3–80 ng/mL	EHNRCAM
NRG1 beta-1 (NRG1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	50 pg/mL	50–20,000 pg/mL	EHN RG1
NRP-1	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	148.39 pg/mL	86.57–354,600 pg/mL	EPX010-12243-901
NSE	Human	ProcartaPlex	Serum, plasma, CSF: 25 µL			EPX010-12335-901
NT-3 (NTF3)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–3,000 pg/mL	EHNTF3
NT-4 (NTF4)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–1,000 pg/mL	EHNTF4
NTproBNP	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	11.13 pg/mL	3.64–14,900 pg/mL	EPX010-12251-901
NT5E	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	27.67 pg/mL	45.12–184,800 pg/mL	EPX010-12305-901
Oncostatin M (OSM)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1 pg/mL	1–1,000 pg/mL	EHO SM
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.8 pg/mL	9.77–40,000 pg/mL	EPX01A-12163-901
Oncostatin M receptor (OSMR)	Human	Uncoated ELISA	CCS, plasma, serum: 10 µL	312.5 pg/mL	312.5–20,000 pg/mL	88-50330-22
Osteoactivin (GPNMB)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	45 pg/mL	45–12,000 pg/mL	EHGPNMB
Osteocalcin	Human	Coated ELISA	Plasma, Serum: 25 µL	0.08 ng/mL	1.56–75 ng/mL	KAQ1381
	Human	Instant ELISA	CCS, plasma, serum: 25 µL	0.2 ng/mL	1.2–75 ng/mL	BMS2020INST
Osteopontin (OPN/SPP1)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–2,000 pg/mL	EMS PPI
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.3 pg/mL	12.2–50,000 pg/mL	EPX01A-12066-901
		Coated ELISA	CCS, plasma, serum: 20 µL	0.26 ng/mL	0.47–30 ng/mL	BMS2066
Osteoprotegerin (OPG)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1 pg/mL	1–900 pg/mL	EHTNFRSF11B
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	1 pg/mL	1–1,200 pg/mL	EMTNFRSF11B
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.2 pg/mL	7.3–30,000 pg/mL	EPX01A-12021-901
p38 MAPK (total)	Multispecies	Coated ELISA	Cell lysate: 10 µL	<16 pg/mL	31.2–2,000 pg/mL	KHO0061
p38 MAPK (total/phospho)	Multispecies	InstantOne ELISA	Cell lysate: 20 µL			85-86023

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
p38 MAPK (total)	Multispecies	InstantOne ELISA	Cell lysate: 10 µL	<16 pg/mL	31.2–2,000 pg/mL	85-86021
p38 MAPK [pThr180/Tyr182]	Multispecies	InstantOne ELISA	Cell lysate: 20 µL			85-86022
P450 demethylation	Human, Rat	Activity Kit	Serum, plasma, CCS: 95 µL	1.6 pmol/100 µL	1.6–20 pmol/100 µL	EIAP450DMT
p53 (total/phospho)	Human	InstantOne ELISA	Cell lysate: 20 µL			85-86123
p53 (total)	Human	InstantOne ELISA	Cell lysate: 20 µL	0.33 U/mL	0.78–50 U/mL	85-86121
p53 colorimetric in-cell	Multispecies	Coated ELISA	NA	NA	NA	62216
p53	Human	Coated ELISA	CCS, serum: 50 µL	0.33 U/mL	0.78–50 U/mL	BMS256
p70 S6K [total/phospho]	Multispecies	InstantOne ELISA	Cell lysate: 20 µL			85-86053
p70 S6K [pThr389]	Multispecies	InstantOne ELISA	Cell lysate: 20 µL			85-86052
p70 S6K (total)	Multispecies	InstantOne ELISA	Cell lysate: 10 µL			85-86051
PAI-1	Monkey	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–6,000 pg/mL	EPSPERPINE1
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	80 pg/mL	80–20,000 pg/mL	EMSERPINE1
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.4 pg/mL	26.17–107,200 pg/mL	EPX01A-12033-901
		Coated ELISA	50 µL (1:50 prediluted)	29.0 pg/mL	78–5,000 pg/mL	BMS2033
NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.03 pg/mL	2.69–11,000 pg/mL	EPX01A-42033-901	
Palladium API	Multispecies	Detection Kit	Serum, plasma, CCS: 100 µL	3.1 nM	3.1–100 nM	EIAPDAPIF
PAPP-A	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.6 ng/mL	0.6–500 ng/mL	EHPAPPA
PARN (DAN)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	35 pg/mL	35–20,000 pg/mL	EHPARN
PARN (cleaved) colorimetric in-cell	Human	Coated ELISA	CCS, plasma, serum: 100 µL	35 pg/mL	35–10,000 pg/mL	EMPARN
PARP (cleaved) near infrared in-cell	Multispecies	Coated ELISA	NA	NA	NA	62219
PARP (cleaved) [214/215]	Human	Coated ELISA	Cell lysate: 20 µL	<0.062 ng/mL	0.156–10 ng/mL	KHO0741
P-cadherin (CDH3)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–18,000 pg/mL	EHCDH3
PD-1 (CD279)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5.04 pg/mL	6.1–25,000 pg/mL	EPX01A-12214-901
		Coated ELISA	Cell lysate: 20 µL	1.14 pg/mL	2.34–150 pg/mL	BMS2214
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	321.47 pg/mL	485–1,990,000 pg/mL	EPX010-26057-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.96 pg/mL	4.88–20,000 pg/mL	EPX01A-12212-901
PD-L1 (CD274)	Human	Coated ELISA	CCS, cell lysate, plasma, serum: 50 µL	0.56 pg/mL	4.69–300 pg/mL	BMS2212
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	3.1 pg/mL	26–107,600 pg/mL	EPX010-26054-901
PD-L2	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	48.17 pg/mL	48.83–200,000 pg/mL	EPX01A-12215-901
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	31.9 pg/mL	257–1,052,900 pg/mL	EPX010-26055-901
PDGF-AA	Human	Coated ELISA	CCS, plasma, serum: 100 µL	40 pg/mL	40–30,000 pg/mL	EHPDGFA
PDGF-AB	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	90 pg/mL	90–6,000 pg/mL	ERPDGFA
PDGF-AB	Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–2,500 pg/mL	EHPDGFB
PDGF-BB	Canine	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–1,200 pg/mL	ECPDGFB
	Porcine	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–2,500 pg/mL	ESPDGFB
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	6.01 pg/mL	7.32–30,000 pg/mL	EPX01A-12071-901
		Coated ELISA	50 µL (1:10 prediluted)	4.6 pg/mL	31.3–2,000 pg/mL	BMS2071
PDGFR alpha	Human	Coated ELISA	CCS, plasma, serum: 100 µL	6.01 pg/mL	7.32–30,000 pg/mL	EPX01A-42071-901
PDGFR beta	Human	Coated ELISA	CCS, plasma, serum: 100 µL	25 pg/mL	25–18,000 pg/mL	EHPDGFRB
PECAM-1 (CD31)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	162.5 pg/mL	488.28–2,000,000 pg/mL	EPX01A-10229-901
		Coated ELISA	CCS, plasma, serum, urine: 10 µL	0.06 ng/mL	0.47–30 ng/mL	BMS229
	Human	Instant ELISA	CCS, plasma, serum: 10 µL	0.06 ng/mL	0.47–30 ng/mL	BMS229INST
	Monkey	Instant ELISA	CCS, plasma, serum, urine: 10 µL	0.06 U/mL	0.48–30 U/mL	BMS651INST
Perforin	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	158.4 pg/mL	73.24–30,000 pg/mL	EPX010-12306-901
		Coated ELISA	Serum, plasma, CCS: 20 µL	11.8 pg/mL	28.1–1,800 pg/mL	BMS2306
Pepsinogen I (PGI)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–6,000 pg/mL	EHPGI
Pepsinogen II (PGC)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	40 pg/mL	40–10,000 pg/mL	EHPGC
Periostin	Human	Coated ELISA	CCS, plasma, serum: 100 µL	80 pg/mL	0.08–60 ng/mL	EHPOSTN
PF-4	Human	Coated ELISA	CCS, plasma, serum: 100 µL	20 pg/mL	20–15,000 pg/mL	EHPF4
PGFM	Multispecies	Competitive ELISA	Serum, plasma, CCS: 50 µL	20.8 pg/mL	50–3,200 pg/mL	EIAPGFM

## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.	
PGRPS (PGLYRP1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	6 pg/mL	6–1,500 pg/mL	EHPGLYRP1	
PIGF-1	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.23 pg/mL	1.22–5,000 pg/mL	EPX01A-12155-901	
PKA (protein kinase A)	Multispecies	Activity Kit	Serum, plasma, CCS: 40 µL	0.366 U/mL	5–25 U/mL	EIAPKA	
PLGF (PGF)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–1,000 pg/mL	EHPGF	
PLGF-2 (PGF)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	1 pg/mL	1–400 pg/mL	EMPGF	
PMN-elastase	Human	Coated ELISA	CCS, CSF, lavage fluid, plasma: 10 µL	1.98 ng/mL	0.16–10 ng/mL	BMS269	
PPBP (NAP-2)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	8.5 pg/mL	8.5–1,000 pg/mL	EHPBPB	
PPBP (TCK-1)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	14 pg/mL	14–8,000 pg/mL	EMPPBP	
PPBP (TCK-1)	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	80 pg/mL	80–50,000 pg/mL	ERPPBP	
Pregnane diol-3-glucuronide (PDG)	Multispecies	Competitive ELISA	Serum, plasma, CCS: 50 µL	0.18 ng/mL	0.39–50 ng/mL	EIAPDG	
proBNP (NPPB)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.14 ng/mL	0.14–100 ng/mL	EHPRONPPB	
Procalcitonin (PCT)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–20,000 pg/mL	EHPCT	
Progesterone	Multispecies	Competitive ELISA	Serum, plasma, CCS: 50 µL	47.9 pg/mL	50–3,200 pg/mL	EIA4C21	
pro-MMP-9	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	50 pg/mL	50–18,000 pg/mL	EMMMP9	
Prolactin (PRL)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–20,000 pg/mL	EMPRL	
Prolactin	Human	Coated ELISA	Serum, plasma, CCS: 50 µL	11.7 pg/mL	15.6–1,000 pg/mL	EHIAPRL	
Prolactin receptor	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	400 pg/mL	0.4–50 ng/mL	ERPRRLR	
Prostaglandin E2	Multispecies	Competitive ELISA	CCS: 100 µL; saliva, serum, urine, whole blood: 10 µL	<15.9 pg/mL	39–5,000 pg/mL	EHPGE2	
PRSS22 (BSSP4)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	60 pg/mL	60–4,000 pg/mL	EMPRSS22	
PRSS27 (marapsin)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	35 pg/mL	35–10,000 pg/mL	EHPRSS27	
PRSS8 (prostasin)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–8,000 pg/mL	EHPRSS8	
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–6,000 pg/mL	EMSELP	
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	95.4 pg/mL	1,464.84–6,000,000 pg/mL	EPX01A-10219-901	
P-selectin (CD62P)	Human	Coated ELISA	Amniotic fluid, CCS, plasma, serum: 10 µL	0.20 ng/mL	0.63–400 ng/mL	BMS219-4	
	Monkey	Coated ELISA	CCS, serum: 10 µL	1.3 U/mL	0.8–50 U/mL	BMS650-4	
PSA free (KLK3)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	45 pg/mL	45–12,000 pg/mL	EHKLK3F	
PSA total (KLK3)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–2,000 pg/mL	EHKLK3T	
PSGL-1	Human	Coated ELISA	100 µL (1:20 prediluted)	1 U/mL	1.6–50 U/mL	BMS255	
PTX3	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	30.3575 pg/mL	52–213,900 pg/mL	EPX010-12281-901	
PVR	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	38.28 pg/mL	54.32–222,500 pg/mL	EPX010-12307-901	
PYY	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	19.53–80,000 pg/mL	EPX010-12198-901		
	Rat	Coated ELISA	CCS, plasma, serum: 100 µL	300 pg/mL	0.3–300 ng/mL	ERAGER	
RAGE	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.8 pg/mL	2–1,775 pg/mL	EPX010-12290-901	
	(MOK)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–1,500 pg/mL	EHMOK
	(STK30)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–10,000 pg/mL	EMSTK30
RANK (TNFRSF11A)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.4 ng/mL	0.4–100 ng/mL	EHTNFRSF11A	
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.6 pg/mL	7.76–31,800 pg/mL	EPX01A-12005-901	
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	3.2–13,200 pg/mL	EPX01A-26037-901	
RANKL	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.6 pg/mL	3.41–14,000 pg/mL	EPX01A-32005-901	
	Human	Coated ELISA	CCS, Urine: 50 µL; plasma, serum: 1 µL	<2 pg/mL	51.2–2,000 pg/mL	EHRNTS	
	Feline	Coated ELISA	CCS, plasma, serum: 100 µL	0.7 pg/mL	0.7–200 pg/mL	EFCCL5	
RANTES (CCL5)	Mouse	Coated ELISA	Serum, plasma: 50 µL; CCS: 100 µL	<5 pg/mL	11.7–750 pg/mL	KMC1031	
	Rat	Coated ELISA	Serum, plasma: 50 µL; CCS: 100 µL	<20 pg/mL	39–2,500 pg/mL	KRC1031	
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	0.61–2,500 pg/mL	EPX01A-10287-901	
	Human	Instant ELISA	Amniotic fluid, CCS, plasma, serum: 10 µL	4.2 pg/mL	31.3–2,000 pg/mL	BMS287-2INST	
	Mouse	Instant ELISA	CCS, plasma, serum: 50 µL	1.2 pg/mL	7.8–500 pg/mL	BMS6009INST	
RARRES2 (TIG2)	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.35 pg/mL	2.4–10,000 pg/mL	EPX01A-26009-901		
	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	6.1 pg/mL	85.5–350,000 pg/mL	EPX01A-36009-901	
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	0.61–2,500 pg/mL	EPX01A-40287-901	
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.5 ng/mL	0.5–50 ng/mL	EHRARRES2	
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	195.31–800,000 pg/mL	EPX01A-12205-901		
RGP4	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	12.97 pg/mL	2.08–8,500 pg/mL	EPX010-12249-901	
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	6 pg/mL	6–50,000 pg/mL	EMREN1	
Renin 1 (REN1)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	32.6 pg/mL	93.8–6,000 pg/mL	BMS2271	
	Human	Coated ELISA	Serum, plasma, CCS: 50 µL	32.6 pg/mL	93.8–6,000 pg/mL	BMS2271	

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
Retinol binding protein urinary	Multispecies	Competitive ELISA	Serum, plasma, CCS: 50 µL	2.9 ng/mL	3.9–1,000 ng/mL	EIARBPUR
Resistin (RETN)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–1,000 pg/mL	EMRETN
Resistin (ADSF)	Human	Coated ELISA	50 µL (1:10 prediluted)	3.1 pg/mL	31–2,000 pg/mL	BMS2040
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.8 pg/mL	5.74–23,500 pg/mL	EPX01A-12040-901
S100A8/A9	Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–2,500 pg/mL	EHS100A8
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	39.014 pg/mL	60.84–249,000 pg/mL	EPX010-12334-901
S100B	Human	ProcartaPlex	Serum, plasma, CSF: 25 µL	1.981 pg/mL	2–7,500 pg/mL	EPX010-12339-901
S6 colorimetric in-cell	Multispecies	Coated ELISA	NA	NA	NA	62207
S6 near infrared in-cell	Multispecies	Coated ELISA	NA	NA	NA	62212
s90K (Mac-2BP)	Human	Coated ELISA	100 µL (1:100 prediluted)	0.92 ng/mL	12.5–200 ng/mL	BMS234
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	500 pg/mL	0.5–300 ng/mL	EHSAA1
	Mouse	Coated ELISA	Plasma, serum: 1 µL	0.03 µg/mL	0.062–0.5 µg/mL	KMA0021
	Multispecies	Coated ELISA	Plasma, serum: 1 µL	<0.5 pg/mL	0.062–0.5 µg/mL	KAA0021
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.9 pg/mL	32–132,600 pg/mL	EPX01A-12136-901
SAA	Human	ProQuantum	CCS, serum, plasma: 2–5 µL	<240 pg/mL	256–4,000,000 pg/mL	A44839
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	4.7 pg/mL	35.3–144,600 pg/mL	EPX01A-12156-901
	Human	Coated ELISA	CCS, serum: 10 µL	13.2 pg/mL	15.6–1,000 pg/mL	BMS245
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–2,000 pg/mL	EHKITLG
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–2,000 pg/mL	EMKITL
SCF	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.57 pg/mL	1.59–6,500 pg/mL	EPX01A-12137-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.57 pg/mL	1.59–6,500 pg/mL	EPX01A-42137-901
	Canine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.5 pg/mL	6.01–24,600 pg/mL	EPX01B-50508-901
SCGF beta	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	21.1 pg/mL	16.79–739,600 pg/mL	EPX01A-12157-901
Sclerostin (SOST)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–10,000 pg/mL	EHSOST
SDF-1 alpha (CXCL12a)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	80 pg/mL	80–6,000 pg/mL	EHCXCL12A
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–600 pg/mL	EMCXCL12
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	20.5 pg/mL	17.09–70,000 pg/mL	EPX01A-12138-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	20.5 pg/mL	38.25–156,700 pg/mL	EPX01A-42138-901
SDF-1 beta (CXCL12b)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	35 pg/mL	35–8,000 pg/mL	EHCXCL12B
Serpин A1 (AAT)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 ng/mL	2–500 ng/mL	EHSERPINA1
Serpин A4	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.12 ng/mL	0.12–35 ng/mL	EHSERPINA4
ShhN (SHH)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	42 pg/mL in assay diluent C, and 8 pg/mL in assay diluent B	8–10,000 pg/mL	EHSHH
	Human	Coated ELISA	Plasma, Serum: 50 µL; CCS: 100 µL	5 pg/mL	5–1,000 pg/mL	EMSHH
	Mouse	Coated ELISA	Tissue lysates, cell lysates: 100 µL	5 pg/mL	5–1,200 pg/mL	EMSHHCL
Siglec-5	Human	Coated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–5,000 pg/mL	EHSIGLEC5
Siglec-7	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	34.58 pg/mL	15.38–63,000 pg/mL	EPX010-12308-901
Siglec-9	Human	Coated ELISA	CCS, plasma, serum: 100 µL	130 pg/mL	0.12–30 ng/mL	EHSIGLEC9
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.58 pg/mL	1.86–7,600 pg/mL	EPX010-12309-901
SLAM (SLAMF1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	60 pg/mL	60–15,000 pg/mL	EHSLAMF1
SPINT1 (HAI-1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.8 ng/mL	0.8–200 ng/mL	EHSPINT1
SPINT2 (HAI-2)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–800 pg/mL	EHSPINT2
ST2 (IL-33R)	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		24.22–99,200 pg/mL	EPX01A-26047-901
	Human	Coated ELISA	Serum, plasma, CCS: 10 µL	4.6 pg/mL	4.7–300 pg/mL	BMS2231
STAT3 near infrared in-cell	Multispecies	Coated ELISA				62214
STAT3 [pY705]	Multispecies	Coated ELISA	Cell lysate: 10 µL	<0.9 U/mL	1.57–100 U/mL	KHO0481
STAT5A (total)	Human	Coated ELISA	Cell lysate: 10 µL	<1 ng/mL	1.56–100 ng/mL	KHO0751
Superoxide dismutase (SOD)	Multispecies	Activity Kit	Serum, plasma, CCS: 10 µL	0.044 U/mL	0.06–4 U/mL	EIASODC
Survivin (BIRC5)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	7.5 pg/mL	108.08–442,700 pg/mL	EPX01A-12158-901
Syndecan 1 (SDC1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	14 pg/mL	14–4,000 pg/mL	EHSDC1
Syndecan-1	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	41.4 pg/mL	13.82–56,600 pg/mL	EPX010-12233-901
TAC1 (TNFRSF13B)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.3 ng/mL	0.3–80 ng/mL	EHTNFRSF13B
Tactile	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	67.21 pg/mL	71.04–291,000 pg/mL	EPX010-12314-901
TARC (CCL17)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.311 pg/mL	0.45–1,850 pg/mL	EPX010-12379-901
Tau [pT181]	Human	Coated ELISA	CCS, CSF, tissue homogenate: 10 µL	<10 pg/mL	15.6–1,000 pg/mL	KHO0631
	Human	ProQuantum	CCS, serum, plasma: 2–5 µL	<0.05 pg/mL	0.064–5,000 pg/mL	A46739
	Human	ProcartaPlex	Serum, plasma, CSF: 25 µL	0.737 pg/mL	2–8,000 pg/mL	EPX010-12349-901

## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
Tau [pT231]	Human	ProcartaPlex	Serum, plasma, CSF: 25 µL	2.09 pg/mL	3–13,300 pg/mL	EPX010-12359-901
		Coated ELISA	CCS, CSF: 50 µL	<12 pg/mL	31.2–2,000 pg/mL	KHB0041
Tau (total)	Human	ProQuantum	CCS, serum, plasma: 2–5 µL	<10 pg/mL	16–250,000 pg/mL	A46738
		ProcartaPlex	Serum, plasma, CSF: 25 µL	6.1 pg/mL	20–80,000 pg/mL	EPX010-12348-901
Tau [pS396]	Human	Coated ELISA	CCS, CSF: 50 µL	<2 pg/mL	15.6–1,000 pg/mL	KHB7031
		Coated ELISA	CCS, cell lysate: 50 µL; CSF: 500 µL; brain homogenate: 5 µL	<2 pg/mL (5,000 cells)	15.6–1,000 pg/mL	KHB7041
Tau [pS199]	Mouse	Coated ELISA	CCS: 50 µL; cell lysate: 5 µL; brain homogenate: 10 µL	<7 pg/mL (5,000 cells)	15.6–1,000 pg/mL	KMB7041
		Coated ELISA	CCS, CSF, Tissue Homogenate: 10 µL	0.7 U/mL	1.56–100 U/mL	KHB8051
TAU [pT231]	Human	Coated ELISA	Cell lysate, brain homogenate: 2 µL	<15 pg/mL	31–2,000 pg/mL	KMB7011
TDP-43	Human	ProcartaPlex	Serum, plasma, CSF: 25 µL	63.7 pg/mL	96–393,200 pg/mL	EPX010-12356-901
TECK (CCL25)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.88 pg/mL	8.96–36,700 pg/mL	EPX010-12381-901
Tenascin-C	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	119.2 pg/mL	557–2,281,800 pg/mL	EPX010-12321-901
TFF-3 (trefoil factor 3)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1.5 ng/mL	1.5–500 ng/mL	EHTFF3
TFPI (tissue factor pathway inhibitor)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–1,800 pg/mL	EHTFPI
TGF alpha	Human	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–1,000 pg/mL	EHTGFA
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	5.1–21,000 pg/mL	EPX01A-12139-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	5.1–21,000 pg/mL	EPX01A-42139-901
TGF beta 1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	25 pg/mL	25–6,000 pg/mL	EHTGFB1
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	3–1,000 ng/mL	EMTGFB1
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	1.1–4,500 pg/mL	EPX01A-10249-901
	Human	Coated ELISA	40 µL (pretreated)	8.6 pg/mL	31–2,000 pg/mL	BMS249-4
	Human/mouse	Uncoated ELISA	Plasma, serum: 20 µL; CCS: 100 µL	8 pg/mL	8–1,000 pg/mL	88-8350
	Mouse	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	1.1–4,500 pg/mL	EPX01A-20608-901
	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.3 pg/mL	1.72–7,050 pg/mL	EPX01A-30249-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	1.1–4,500 pg/mL	EPX01A-40249-901
	Canine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	1.1–4,500 pg/mL	EPX01A-50249-901
TGF beta 2	Porcine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	1.1–4,500 pg/mL	EPX01A-60249-901
TGFb RII (TGF-beta receptor type-2; TGFBR2)	Human	Coated ELISA	100 µL (1:50 prediluted)	6.6 pg/mL	31.0–1,000 pg/mL	BMS254
Thiol	Multispecies	Detection Kit	Serum, plasma, CCS: 100 µL	4.62 nM	78–10,000 nM	EIARSHF
Thrombopoietin (THPO)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	90 pg/mL	90–6,000 pg/mL	EHTHPO
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–20,000 pg/mL	EMTHPO
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.7 pg/mL	94.01–385,100 pg/mL	EPX01A-12161-901
Thrombospondin 1 (THBS1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	6 ng/mL	6–2,000 ng/mL	EHTHBS1
Thyroid Peroxidase (TPO)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.3 ng/mL	0.3–100 ng/mL	EHTPO
Thyroid Stimulating Hormone (TSH)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–2,000 pg/mL	EHTSH
Thyroglobulin (TG)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	220 pg/mL	0.22–50 ng/mL	EHTG
Thyroxine (T4)	Multispecies	Competitive ELISA	Serum, plasma, CCS: 10 µL	0.29 ng/mL	0.06–50 ng/mL	EIAT4C
Tie-1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	600 pg/mL	0.6–500 ng/mL	EHTIE1
TIE-2 (CD202b)	Human	Coated ELISA	CCS, plasma, serum: 25 µL	0.03 ng/mL	0.16–10 ng/mL	BMS2042
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	18.98 pg/mL	31.23–127,900 pg/mL	EPX010-12042-901
TIM-3	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		61.04–250,000 pg/mL	EPX01A-12219-901
	Mouse	Coated ELISA	CCS, plasma, serum: 10 µL	35.3 pg/mL	78.1–5,000 pg/mL	BMS2219
TIMD-4	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	22.6 pg/mL	60.69–248,600 pg/mL	EPX010-12332-901
	Mouse	Coated ELISA	Tissue lysates, cell lysates: 100 µL	3 pg/mL	3–1,000 pg/mL	EMTIMP1CL
TIMP-1	Rat	Coated ELISA	Tissue lysates, cell lysates: 100 µL	4 pg/mL	4–3,000 pg/mL	ERTIMP1CL
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	26.1 pg/mL	36.6–150,000 pg/mL	EPX01A-12018-901
TIMP-2	Human	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	25–7,000 pg/mL	EHTIMP2
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	80 pg/mL	0.08–60 ng/mL	EMTIMP2
TIMP-4	Human	Coated ELISA	CCS, plasma, serum: 100 µL	25 pg/mL	25–7,000 pg/mL	EHTIMP4

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
TNF alpha	Bovine	Coated ELISA	CCS, plasma, serum: 100 µL	0.1 ng/mL	0.1–30 ng/mL	EBTNF
	Canine	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–700 pg/mL	ECTNF
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.3 pg/mL	4.25–17,400 pg/mL	EPX01A-50509-901
	Equine	Uncoated ELISA	CCS, serum: 100 µL	<15.6 pg/mL	15.6–1,000 pg/mL	ESS0017
		Coated ELISA	CCS, plasma, serum: 50 µL	<0.09 pg/mL	0.5–32 pg/mL	KHC3014
		Coated ELISA	CCS, plasma, serum: 50 µL	5 pg/mL	23–1,500 pg/mL	BMS2034
		Instant ELISA	Amniotic fluid, CCS, plasma, serum, synovial fluid, urine: 50 µL	1.65 pg/mL	7.8–500 pg/mL	BMS223INST
		HS Coated ELISA	CCS, plasma, serum: 50 µL	0.13 pg/mL	0.31–20 pg/mL	BMS223HS
	Human	Uncoated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–500 pg/mL	88-7346
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.215 pg/mL	0.45–1,830 pg/mL	EPXS010-10223-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.4 pg/mL	8.54–35,000 pg/mL	EPX01A-10223-901
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.01 pg/mL	0.0128–5,000 pg/mL	A35601
TNF beta (LT-alpha)	Porcine	Uncoated ELISA	CCS, plasma, serum: 100 µL			CSC1753
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	2.27 pg/mL	6.47–26,500 pg/mL	EPX01A-66053-901
	Monkey	Coated ELISA	CCS, serum: 50 µL	6 U/mL	28.1–1,800 U/mL	BMS654
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.39 pg/mL	3.7–15,000 pg/mL	EPX01A-20607-901
		ProcartaPlex HS	Serum, plasma: 25 µL; CCS: 50 µL	0.044 pg/mL	0.34–1,390 pg/mL	EPXS010-20607-901
	Mouse	Uncoated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–1,000 pg/mL	88-7324
		Coated ELISA	CCS, plasma, serum: 50 µL	3.7 pg/mL	31.3–2,000 pg/mL	BMS607-3
		Instant ELISA	CCS, plasma, serum: 50 µL	4 pg/mL	31.3–2,000 pg/mL	BMS607/2INST
		HS Coated ELISA	CCS, plasma, serum: 50 µL	0.75 pg/mL	3.13–200 pg/mL	BMS607HS
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.3 pg/mL	0.32–5,000 pg/mL	A43658
TNF-RI (60 kDa)	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.4 pg/mL	16.64–65,800 pg/mL	EPX01A-40223-901
	Rat	Coated ELISA	CCS, plasma, serum: 50 µL	<4 pg/mL	15.6–1,000 pg/mL	KRC3011
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.4 pg/mL	4.9–20,000 pg/mL	EPX01A-30622-901
	Uncoated ELISA	CCS, plasma, serum: 100 µL	16 pg/mL	16–2,000 pg/mL	88-7340	
		Coated ELISA	CCS, serum: 50 µL	11 pg/mL	39.1–2,500 pg/mL	BMS622
		Coated ELISA	CCS, plasma, serum: 100 µL	4.6 pg/mL	15.6–1,000 pg/mL	BMS202
	Human	Instant ELISA	Amniotic fluid, CCS, plasma, serum, synovial fluid, urine: 100 µL	4.6 pg/mL	15.6–1,000 pg/mL	BMS202INST
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.6 pg/mL	6.1–25,000 pg/mL	EPX01A-10202-901
		ProQuantum	CCS, serum, plasma: 2–5 µL	<0.05 pg/mL	0.064–25,000 pg/mL	A42898
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	2.8–11,500 pg/mL	EPX01A-40202-901
tPA	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	1 pg/mL	1–300 pg/mL	EMTNFRSF1A
	Human	Coated ELISA	CCS, plasma, serum, urine: 10 µL	0.05 ng/mL	0.8–5 ng/mL	BMS203
		Instant ELISA	CCS, plasma, serum: 10 µL	53 pg/mL	0.78–5 ng/mL	BMS203INST
	Monkey	Coated ELISA	CCS, serum: 10 µL	0.06 U/mL	0.9–6 U/mL	BMS653
TNF-R1B (80 kDa)	Instant ELISA	CCS, plasma, serum: 10 µL	0.059 U/mL	0.9–6 U/mL	BMS653INST	
	Human	Coated ELISA	CCS, plasma, serum, urine: 10 µL	0.10 ng/mL	0.16–10 ng/mL	BMS211
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	79.4 pg/mL	159–650,000 pg/mL	EPX01A-10203-901
TNF-RII	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.1 pg/mL	1.27–5,200 pg/mL	EPX01A-10211-901
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	5 pg/mL	42.72–175,000 pg/mL	EPX01A-10258-901
		Coated ELISA	CCS, serum: 10 µL	6 pg/mL	15.6–1,000 pg/mL	BMS258-2
TRAIL (CD253)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	2 pg/mL	2–600 pg/mL	EMTNFSF10
	Human	Coated ELISA	CCS, plasma, serum: 50 µL	5 pg/mL	15.6–1,000 pg/mL	BMS204
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.6 pg/mL	12.72–52,100 pg/mL	EPX01A-12004-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.6 pg/mL	12.72–52,100 pg/mL	EPX01A-42004-901
TRAIL-R1	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		19.56–80,100 pg/mL	EPX01A-12010-901
TRAIL-R2	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.94 pg/mL	2.4–9,850 pg/mL	EPX01A-12011-901
TRAIL-R3 (TNFRSF10C)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–4,000 pg/mL	EHTNFRSF10C
TRAIL-R4 (TNFRSF10D)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–4,000 pg/mL	EHTNFRSF10D
TRANCE (TNFSF11)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	4 pg/mL	4–2,000 pg/mL	EMTNFSF11
Transferrin	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1 ng/mL	1–750 ng/mL	EHTF
Trappin-2 (PI3)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	5 pg/mL	5–5,000 pg/mL	EHPI3

## Targets across platforms (continued)

Target	Species	Format	Volume	Sensitivity	Range	Cat. No.
TREM-1 (CD354)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	70 pg/mL	70–50,000 pg/mL	EHTREM1
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	139.3 pg/mL	689–2,820,100 pg/mL	EPX010-12241-901
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	0.25 ng/mL	0.25–200 ng/mL	EMTREM1
TREM-2	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	9.735 pg/mL	10–41,700 pg/mL	EPX010-12343-901
Triiodothyronine (T3)	Multispecies	Competitive ELISA	Serum, plasma, CCS: 100 µL	37.4 pg/mL	78–5,000 pg/mL	EIAT3C
Troponin I (troponin I type 3, cardiac; TNNI3)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	100 pg/mL	100–8,000 pg/mL	EHTNNI3
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	9.7 pg/mL	10–41,700 pg/mL	EPX010-12257-901
Troponin T (troponin T, slow skeletal muscle; TNNT1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.35 ng/mL	0.35–25 ng/mL	EHTNNT1
TROY (TNFRSF19)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	50 pg/mL	0.05–400 ng/mL	EHTNFRSF19
TSLP	Human	Coated ELISA	CCS, plasma, serum: 100 µL	3 pg/mL	10–6,000 pg/mL	EHTSLP
	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	1 pg/mL	1–200 pg/mL	EMTSLP
	Human	Uncoated ELISA	CCS, plasma, serum: 100 µL	8 pg/mL	8–1,000 pg/mL	88-7497
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.5 pg/mL	3.42–14,000 pg/mL	EPX01A-12164-901
	Human	Uncoated ELISA	CCS, serum: 100 µL	16 pg/mL	16–2,000 pg/mL	88-7490
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.7 pg/mL	8.71–35,700 pg/mL	EPX01A-26095-901
	Human	Coated ELISA	CCS, plasma, serum: 100 µL	40 pg/mL	40–3,000 pg/mL	EHTNSF12
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	12.36 pg/mL	20.48–83,900 pg/mL	EPX01A-12006-901
TWEAK (CD255)	Human	Instant ELISA	CCS, plasma, serum: 50 µL	9.7 pg/mL	15.6–1,000 pg/mL	BMS2006INST
TWEAK R (TNFRSF12A)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	95 pg/mL	95–25,000 pg/mL	EMTNFRSF12A
TYRO-3	Human	Coated ELISA	Serum, plasma, CCS: 2 µL	4.6 pg/mL	4–250 pg/mL	BMS2287
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	13.1 pg/mL	24–50,000 pg/mL	EPX010-12287-901
Ubiquitin 1 RPS27A	Human	Coated ELISA	CCS, plasma, serum: 100 µL	30 pg/mL	30–20,000 pg/mL	EHRPS27A
UCHL1	Human	ProcartaPlex	Serum, plasma, CSF: 25 µL	663.431 pg/mL	742–3,038,100 pg/mL	EPX010-12338-901
ULBP-1	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	83.59 pg/mL	142.75–584,700 pg/mL	EPX010-12310-901
ULBP-3	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	47.49 pg/mL	19.78–81,000 pg/mL	EPX010-12312-901
ULBP-4	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	68.58 pg/mL	82.30–337,100 pg/mL	EPX010-12313-901
uPa (PRAP1)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	10 pg/mL	10–3,200 pg/mL	EHPRAP1
uPAR (PLAUR)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	15 pg/mL	15–4,000 pg/mL	EHPLAUR
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	49.7 pg/mL	53–215,500 pg/mL	EPX010-12294-901
Uromodulin (UMOD)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	40 pg/mL	40–10,000 pg/mL	EHUMOD
VAP-1	Human	Coated ELISA	10 µL (1:100 prediluted)	19 pg/mL	31.3–2,000 pg/mL	BMS259
VCAM-1 (CD106)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	1.5 pg/mL	1.5–500 pg/mL	EMVCAM1
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	6.7 pg/mL	11.47–47,000 pg/mL	EPX01A-10232-901
	Human	Coated ELISA	100 µL (1:50 prediluted)	0.6 ng/mL	3.15–100 ng/mL	BMS232
	Rat	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.5 pg/mL	24.93–102,100 pg/mL	EPX01A-36046-901
VEGF	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.6 pg/mL	9.88–40,500 pg/mL	EPX01A-40232-901
	Human	Coated ELISA	CCS, plasma, serum: 50 µL	<5 pg/mL	23.4–1,500 pg/mL	KHG0111
		ProQuantum	CCS, plasma, serum: 2–5 µL	<0.3 pg/mL	0.32–25,000 pg/mL	A35602
VEGF-A	Mouse	Coated ELISA	CCS, plasma, serum: 50 µL	20.0 pg/mL	62.5–4,000 pg/mL	BMS619-2
	Human	Coated ELISA	Tissue lysates, cell lysates: 100 µL	10 pg/mL	10–6,000 pg/mL	EHVEGFACL
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.73 pg/mL	5.86–24,000 pg/mL	EPX01A-10277-901
		Coated ELISA	CCS, plasma, serum: 50 µL	7.9 pg/mL	15.6–1,000 pg/mL	BMS277-2
	Mouse	Coated ELISA	Tissue lysates, cell lysates: 100 µL	2 pg/mL	2–1,000 pg/mL	EMVEGFACL
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	1.6–6,600 pg/mL	EPX01A-20619-901
		ProQuantum	CCS, plasma, serum: 2–5 µL	<1 pg/mL	1.6–25,000 pg/mL	A46562
	Rat	Coated ELISA	Plasma, serum: 50 µL; CCS: 100 µL	2 pg/mL	2–200 pg/mL	ERVEGFA
		Coated ELISA	Tissue lysates, cell lysates: 100 µL	2 pg/mL	2–200 pg/mL	ERVEGFACL
		ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.2 pg/mL	5.54–22,700 pg/mL	EPX01A-30619-901
VEGF-B	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1.73 pg/mL	5.86–24,000 pg/mL	EPX01A-40277-901
	Canine	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	1 pg/mL	5.15–21,100 pg/mL	EPX01A-50277-901
VEGF-C	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	0.6 ng/mL	0.6–160 ng/mL	EMVEGFB
VEGF-D	Human	Coated ELISA	CCS, plasma, serum: 20 µL	0.057 ng/mL	0.23–15 ng/mL	BMS297/2
	Rat	Coated ELISA	CCS, plasma, serum: 50 µL	27.0 pg/mL	47–3,000 pg/mL	BMS626/2
VEGF-E	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.88 pg/mL	12.21–50,000 pg/mL	EPX01A-12076-901
	NHP	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	0.88 pg/mL	12.21–50,000 pg/mL	EPX01A-42076-901

<b>Target</b>	<b>Species</b>	<b>Format</b>	<b>Volume</b>	<b>Sensitivity</b>	<b>Range</b>	<b>Cat. No.</b>
VEGF-R1 (FLT-1)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	43.3 pg/mL	48.8–200,000 pg/mL	EPX01A-10268-901
		Coated ELISA	CCS, plasma, serum: 50 µL	0.03 ng/mL	0.16–10 ng/mL	BMS268-3
	Mouse	Coated ELISA	Serum, plasma: 50 µL; CCS: 100 µL	8 pg/mL	4.14–3,000 pg/mL	EMFLT1
VEGF-R2 (KDR)	Mouse	Coated ELISA	CCS, plasma, serum: 100 µL	80 pg/mL	80–20,000 pg/mL	EMVEGFR2
	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	13.8 pg/mL	48.8–200,000 pg/mL	EPX01A-12019-901
		Coated ELISA	50 µL (1:25 prediluted)	7 pg/mL	78–5,000 pg/mL	BMS2019
VEGF-R3 (FLT-4)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		610.35–2,500,000	EPX01A-12064-901
		Coated ELISA	50 µL (1:10 prediluted)	0.03 ng/mL	0.6–40 ng/mL	BMS2064
VISTA (B7-H5)	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL	7.618 pg/mL	8.64–35,400 pg/mL	EPX010-12327-901
Vitronectin (VTN)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.8 ng/mL	0.8–200 ng/mL	EHVTN
vWF (von Willebrand factor)	Human	Coated ELISA	CCS, plasma, serum: 100 µL	0.4 ng/mL	0.4–120 ng/mL	EHVWF
WISP-1	Human	Coated ELISA	CCS, plasma, serum: 100 µL	50 pg/mL	50–15,000 pg/mL	EHWISP1
XIAP	Human	Coated ELISA	CCS, plasma, serum: 100 µL	250 pg/mL	0.25–600 ng/mL	EHXIAP
ZAG	Human	ProcartaPlex	Serum, plasma: 25 µL; CCS: 50 µL		97.66–400,000 pg/mL	EPX01A-12201-901
		Coated ELISA	CCS, plasma, serum: 10 µL	0.174 ng/mL	0.23–15.0 ng/mL	BMS2201

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