

## eFluor<sup>®</sup> organic dyes

**Optimized for multicolor flow cytometry**

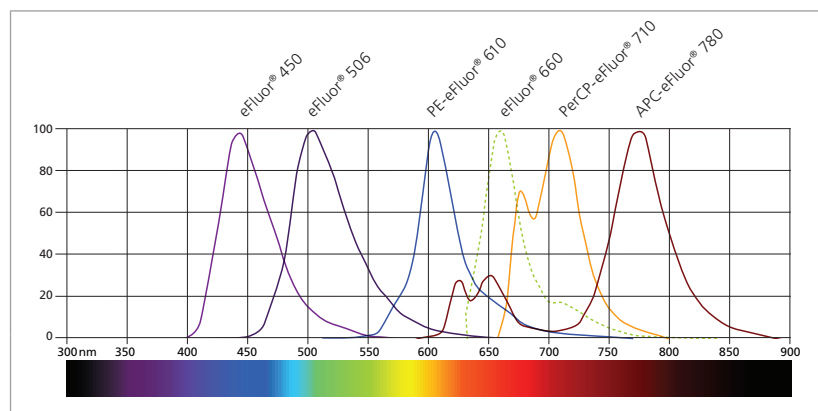
### Featuring

- eFluor<sup>®</sup> 450
- eFluor<sup>®</sup> 506 *New*
- PerCP-eFluor<sup>®</sup> 710
- PE-eFluor<sup>®</sup> 610
- eFluor<sup>®</sup> 660
- APC-eFluor<sup>®</sup> 780

The eBioscience<sup>®</sup> eFluor<sup>®</sup> organic dyes are a proprietary line of fluorescent dyes within the eFluor<sup>®</sup> brand engineered for superior optical performance and detection for applications using laser-based systems, notably flow cytometry.

All eFluor<sup>®</sup> products are named for their emission wavelength, and these organic dyes are fully compatible with other commonly used fluorescent molecules. These features, combined with our broad portfolio of biological content, easily enable dye selection for optimized multicolor antibody panel design for flow cytometry.

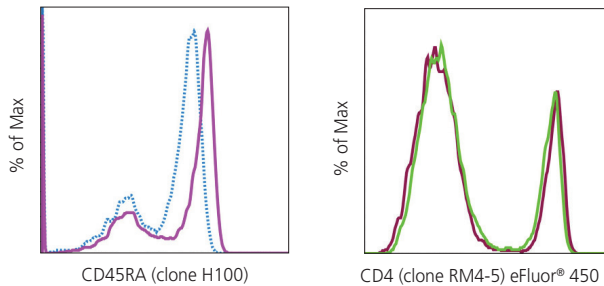
**eFluor<sup>®</sup> Organic Dye Emission Spectra**



## Violet laser (405 nm)

### eFluor 450 (peak emission 450 nm)

The eFluor 450 organic dye was developed to provide a high-performance fluorochrome for flow cytometry as a competitive alternative for Pacific Blue™, Horizon™ V450 and VioBlue®. Stability data shows eFluor 450 performs equally as bright, with a minimal loss of fluorescence, when cells are exposed to a formaldehyde fixative treatment for up to 24 hours.



#### Benefits of eFluor 450 include

- Equal or better fluorescence intensity as compared to several other violet-excited organic dyes
- Stable performance when treated with aldehyde fixation
- Broad portfolio of options to extend multicolor panel design to the violet laser

#### Fluorescence intensity comparison.

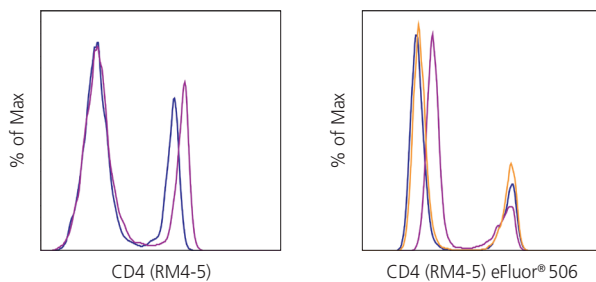
Left panel: Human PBMCs stained with Anti-CD45RA (clone H100) conjugated to eFluor® 450 (purple line) or Pacific Blue™ (blue dotted line).

#### Stability of eFluor® 450.

Right panel: Mouse splenocytes stained with Anti-CD4 eFluor® 450 (clone RM4-5) and analyzed immediately (red line). The sample was then fixed in 2% formaldehyde overnight at 4°C and analyzed again (green line).

### eFluor 506 (peak emission 506 nm)

The newest member of the eFluor® family of conjugates, eFluor 506, adds versatility to multicolor panels designed for use with violet laser-equipped flow cytometers. Like other eFluor reagents, it is engineered for superior optical performance and compatibility with eBioscience® fluorochrome conjugates, buffers, and fixatives.



#### Benefits of eFluor 506 include

- Direct alternative for AmCyan and Horizon V500
- Similar or better fluorescence intensity than other 500 nm-emitting organic dyes
- Compatible with intracellular staining protocols for cytokine or transcription factor analysis

#### Fluorescence intensity comparison.

Left panel: Mouse splenocytes were stained with CD4 (clone RM4-5) conjugated to eFluor® 506 (purple line) or to Horizon™ V500 (blue histogram), using the same concentration of antibody.

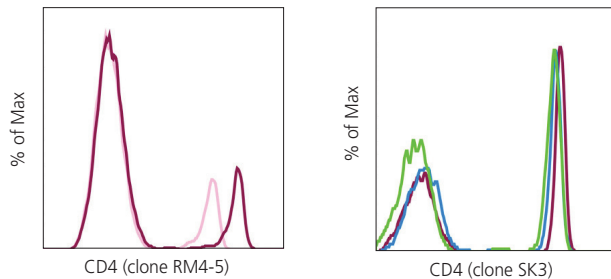
#### Stability of eFluor® 506.

Right panel: Mouse splenocytes stained with Anti-CD4 (clone RM4-5) and either left unfixed (blue line), or were fixed for 30 minutes in Foxp3/Transcription Factor buffer set (purple line) or 30 minutes in Intracellular (IC) Fixation buffer followed by methanol (orange line).

## Blue laser (488 nm)

### PerCP-eFluor 710 (peak emission 710 nm)

The PerCP-eFluor 710 tandem dye was developed as an optimal choice for the FL3 channel on a blue laser line. It is consistently two to three times brighter than PerCP-Cyanine5.5 when evaluated in clone-to-clone comparison tests on identical samples. Although PerCP-eFluor 710 is slightly red-shifted in its emission compared to PerCP-Cyanine5.5 (710 nm vs. 685 nm), it uses the same filter sets.



#### Benefits of PerCP-eFluor 710 include

- Greater mean fluorescence intensity (MFI) as compared to PerCP-Cyanine5.5
- No need for compensation out of the PE detector
- Stable performance when treated with formaldehyde fixation or exposed to ambient light

#### Staining performance compared to PerCP-Cyanine5.5.

Left panel: Direct comparison of mouse splenocytes stained with Anti-mouse CD4 (clone RM4-5) conjugated to either PerCP-eFluor® 710 (red line) or PerCP-Cyanine5.5 (pink line).

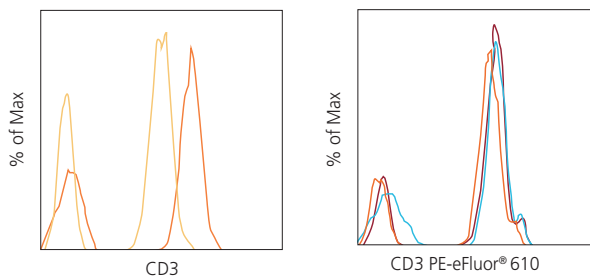
#### Effects of light exposure or fixation on PerCP-eFluor® 710.

Right panel: Human PBMCs were stained with Anti-CD4 PerCP-eFluor® 710 (clone SK3) and analyzed immediately (red line). The sample was then divided and either exposed to ambient light for six hours (blue line) or fixed in 2% formaldehyde overnight at 4°C (green line) and analyzed again.

## Yellow-green laser (561 nm)

### PE-eFluor 610 (peak emission 610 nm)

PE-eFluor 610 is a high-performance tandem fluorophore for use in multicolor flow cytometry. It is designed for use with flow cytometers equipped with blue, green, or yellow-green laser lines (488, 532, or 561 nm) and has a peak emission of 607 nm that can be detected using typical filters for PE-Texas® Red, such as a 610/20 bandpass filter.



#### Benefits of PerCP-eFluor 610 include

- Brighter than PE-Texas Red
- Reduced compensation out of other far-red channels
- Stable performance when treated with formaldehyde fixation or exposed to ambient light

#### PE-eFluor® 610 is brighter than PE-Texas Red®.

Left panel: Normal human peripheral blood cells were stained with CD3 conjugated to PE-eFluor® 610 (dark orange line) or PE-Texas Red (light orange line).

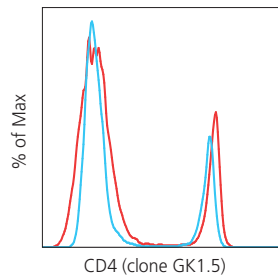
#### Photostability of PE-eFluor® 610.

Right panel: Normal human peripheral blood cells were stained with Anti-CD3 PE-eFluor® 610 (clone UCHT1). Cells were then washed and incubated for six hours at 4°C in the dark (red line), at room temperature in ambient light (blue line), or at room temperature on the windowsill (orange line).

## Red laser (633 nm)

### eFluor 660 (peak emission 668 nm)

eFluor 660 is configured as an alternative to Alexa Fluor™ 647 or APC. The spectral properties make it an ideal fluorophore that can be used in any flow cytometry panel incorporating the red laser.



#### Benefits of eFluor 660 include

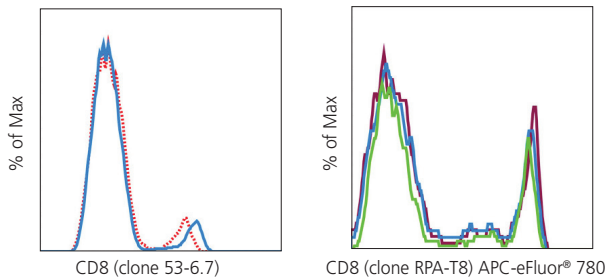
- Direct alternative for APC and Alexa Fluor 647 fluorochromes
- Stable performance when treated with formaldehyde fixation

#### Effects of fixation on eFluor® 660.

Mouse splenocytes stained with Anti-CD4 eFluor® 660 (clone GK1.5) and analyzed immediately (dotted red line). The sample was then fixed in 2% formaldehyde overnight at 4°C (blue line) and analyzed again.

## APC-eFluor 780 (peak emission 780 nm)

APC-eFluor 780 has similar spectral properties to APC-H7, APC- Cyanine7 and APC-Alexa Fluor™ 750. It can replace any of these tandem dyes when designing a multicolor staining panel. The APC-eFluor 780 tandem dye is easily compensated when used with APC.



#### Benefits of APC-eFluor 780 include

- Equal or better sensitivity than APC-H7 tandem conjugates
- Stable performance when treated with formaldehyde fixation or exposed to ambient light
- Uses same filter sets as existing comparative fluorochromes

#### Comparison with APC-H7.

Left panel: Mouse splenocytes stained with Anti-CD8 (clone 53-6.7) conjugated to APC-eFluor® 780 (blue line) or APC-H7 (red line).

#### Stability of APC-eFluor 780.

Right panel: Human peripheral blood mononuclear cells (PBMCs) were stained with Anti-CD8 APC-eFluor® 780 (clone RPA-T8) and analyzed immediately (red line). The sample was then divided and either exposed to ambient light for six hours (blue line) or fixed in 2% formaldehyde for 30 minutes at room temperature (green line) and analyzed again.

## eFluor product listing

Human	Clone	Cat. No.	Violet laser		Blue laser	Blue/Green/ Yellow- green laser	Red laser	
			eFluor® 450	eFluor® 506	PerCP- eFluor® 710	PE- eFluor®610	eFluor® 660	APC- eFluor® 780
AHR	FF3399	9854			■		■	
AKT (pS473)	SDRNR	9715	■					
alpha beta TCR	IP26	9986			■			
Basophil Marker	2D7	9748	■					
BATF	MBM7C7	9860			■		■	
Bcl-6	BCL-UP	9880			■			
BTK/ITK (pY551/Y551)	M4G3LN	9015			■			
beta-Catenin	15B8	2567					■	
CCL4 (MIP-1b)	FL34Z3L	7540			■			
CCL5 (RANTES)	VL1	9905					■	
CCL7 (MCP-3)	OLGMASCE	7077					■	
CCL8 (MCP-2)	DWZEE	9789					■	
CD1a	HI149	0019	■		■			
CD1c	L161	0015			■			
CD1d	51.1	0016			■			
CD2	RPA-2.10	0029	■					
CD3	SK7	0036	■		■			■
CD3	OKT3	0037	■		■		■	■
CD3	UCHT1	0038	■	■		■		■
CD4	SK3 (SK-3)	0047	■		■			■
CD4	OKT4 (OKT-4)	0048	■				■	■
CD4	RPA-T4	0049	■	■		■		■
CD5	UCHT2	0059			■			
CD7	4H9	0078			■			
CD7	eBio124-1D1 (124-1D1)	0079	■					■
CD8	OKT8 (OKT-8)	0086	■					■
CD8	SK1	0087	■		■			■
CD8a	RPA-T8	0088	■	■		■		■
CD10	SN5c	0108			■			
CD11b	CBRM1/5	0113			■			
CD11b	ICRF44	0118			■			■
CD11c	3.9	0116	■	■	■	■		■
CD11c	BU15	0128						■
CD13	WM-15 (WM15)	0138			■			
CD14	61D3	0149	■	■	■	■		■
CD15	MMA	0158	■		■			
CD15	HI98	0159	■		■			
CD16	eBioCB16 (CB16)	0168	■			■		■
CD19	J3-129	0197			■			
CD19	SJ25C1	0198	■		■			■
CD19	HIB19	0199	■	■		■		■
CD20	2H7	0209	■	■		■		■
CD21	HB5	0219			■			
CD22	eBio4KB128 (4KB128)	0229			■			
CD23	EBVCS2	0238	■					■
CD24	eBioSN3 (SN3 A5-2H10)	0247	■		■			■
CD25	BC96	0259	■					■
CD27	O323	0279	■		■	■		■
CD28	CD28.2	0289	■			■		■
CD29	TS2/16	0299			■			
CD31 (PECAM-1)	WM-59 (WM59)	0319	■		■			■
CD32	6C4 (CD32)	0329	■		■			
CD33	P67.6	0337	■					
CD34	4H11	0349	■		■	■		■
CD36	eBioNL07 (NL07)	0369			■		■	
CD38	HB7	0388	■		■			
CD38	HIT2	0389	■			■		■
CD39	eBioA1 (A1)	0399			■			
CD40	5C3	0409	■		■			
CD41a	HIP8	0419	■		■			
CD42a	GR-P	0428	■					
CD44	IM7	0441				■		■
CD45	HI30	0459	■	■	■	■		■
CD45	2D1	9459	■					
CD45R (B220)	RA3-6B2	0452	■	■	■	■	■	■
CD45RA	HI100	0458	■	■		■		■
CD45RO	UCHL1	0457	■		■			■
CD46	8E2	0469			■			
CD47	B6H12	0479			■			
CD49a (Integrin alpha 1)	TS2/7	9490			■			

Human (continued)	Clone	Cat. No.	Violet laser		Blue laser	Blue/Green/ Yellow- green laser	Red laser	
			eFluor® 450	eFluor® 506	PerCP- eFluor® 710	PE- eFluor®610	eFluor® 660	APC- eFluor® 780
CD49f (Integrin alpha 6)	eBioGoH3 (GoH3)	0495	■		■			
CD54 (ICAM-1)	HA58	0549			■			
CD56 (NCAM)	TULY56	0566	■	■				
CD56 (NCAM)	CMSSB	0567			■	■		■
CD57	TB01 (TBO1)	0577	■				■	
CD62L (L-selectin)	DREG-56 (DREG56)	0629	■		■	■		■
CD62P (P-Selectin)	Psel.KO2.3	0626			■			
CD63	H5C6	0639	■				■	
CD64 (Fc gamma Receptor 1)	10.1	0649			■			■
CD68	eBioY1/82A (Y1/82A)	0689				■		
CD69	FN50	0699	■		■			
CD70	113-16	0709					■	
CD72	J4-117	0729					■	
CD73	AD2	0739	■		■			
CD75	LN-1	0759					■	
CD79a	HM47	0792						■
CD80 (B7-1)	2D10.4	0809			■			
CD81	1D6-CD81	0819						
CD83	HB15e	0839			■			
CD85d (ILT4)	42D1	5149			■			
CD86 (B7-2)	IT2.2	0869			■			
CD87 (UPAR)	VIM5	3879			■			
CD90 (Thy-1)	eBio5E10 (5E10)	0909			■			
CD91	A2MR-a2	0919					■	
CD95 (APO-1/Fas)	DX2	0959	■		■			
CD96 (TACTILE)	NK92.39	0969			■			
CD103 (Integrin alpha E)	Ber-ACT8	1037			■			
CD104 (Integrin beta 4)	439-9B	1049					■	
CD105 (Endoglin)	SN6	1057	■					
CD107a (LAMP-1)	eBioH4A3	1079	■		■	■	■	
CD107b (LAMP-2)	eBioH4B4 (H4B4)	1078					■	
CD114	LMM741	1149			■			
CD117 (c-kit)	104D2	1178	■		■			
CD122	TU27	1228			■			
CD123	6H6	1239	■			■		■
CD126	47.7G7.1F2	1269			■			
CD127	eBioRDR5	1278	■			■	■	■
CD133	TMP4	1338			■			
CD137 (4-1BB)	4B4 (4B4-1)	1379			■			
CD146	P1H12	1469	■				■	
CD152 (CTLA-4)	14D3	1529			■		■	
CD154 (CD40 Ligand)	24-31	1548	■		■	■		■
CD155	2H7CD155	1550			■			
CD158f	HP-MA4	1589	■					
CD160	BY55	1609					■	
CD161	HP-3G10	1619	■			■		
CD162 (PSGL-1)	FLEG	1629			■			
CD163	eBioGHI/61 (GHI/61)	1639			■			
CD166 (ALCAM)	3A6	1668			■			
CD169 (Siglec-1)	7-239	1699				■		
CD172a (SIRP alpha)	15-414	1729			■			
CD177	MEM-166 (MEM166)	1779					■	
CD182 (CXCR2)	ebio5E8-C7-F10 (5E8-C7-F10)	1829			■			
CD183 (CXCR3)	CEW33D	1839				■	■	
CD184 (CXCR4)	12G5	9999			■			
CD185 (CXCR5)	MU5UBEE	9185	■		■	■		
CD194 (CCR4)	D8SEE	1949			■			
CD195 (CCR5)	NP-6G4	1956			■			
CD196 (CCR6)	R6H1	1969			■	■		
CD197 (CCR7)	3D12	1979			■	■		■
CD199 (CCR9)	BBC3M4	1999					■	
CD200	OX104	9200			■			
CD200 Receptor	OX108	9201			■			
CD206 (MMR)	19.2	2069	■		■			
CD217 (IL-17 Receptor A)	424LTS	7917			■			
CD223 (Lag-3)	3DS223H	2239	■		■	■		■
CD235a (Glycophorin A)	6A7M	9884	■					
CD235a (Glycophorin A)	HIR2 (also GA-R2)	9987	■		■			
CD243 (ABCB1)	UIC2	2439			■			
CD247	6B10.2	2479			■			
CD258 (LIGHT)	7-3 (7)	2589			■			

Human (continued)	Clone	Cat. No.	Violet laser		Blue laser	Blue/Green/ Yellow- green laser	Red laser	
			eFluor® 450	eFluor® 506	PerCP- eFluor® 710	PE- eFluor®610	eFluor® 660	APC- eFluor® 780
CD273 (B7-DC)	MIH18	5888			■			
CD274 (B7-H1)	MIH1	5983	■		■			
CD276 (B7-H3)	7-517	2769			■			
CD278 (ICOS)	ISA-3	9948	■		■	■		■
CD279 (PD-1)	eBioJ105 (J105)	2799			■	■		■
CD279 (PD-1)	MIH4	9969			■			
CD294	BM16	2949					■	
CD300c	TX45	3006					■	
CD300f (IREM-1)	UP-D1	3008					■	
CD303a	201A	9818	■		■			
CD304	TNKUSOHA	3049	■		■	■		■
CD307d	413D12	3079			■			
CD307e	509F6	3078					■	
CD314 (NKG2D)	1D11	5878			■			
CD319 (CRACC)	162	2229			■			
CD324 (E-cadherin)	DECMA-1	3249			■		■	
CD325 (N-cadherin)	8C11	3259			■			
CD326 (EpcAM)	1B7	9326			■		■	
CD335 (NKp46)	9E2	3359	■		■			
CD336 (NKp44)	44.189	3369	■		■			
CD337 (NKp30)	AF29-4D12	3379	■					
CD354	Lndnb3r	3549					■	
CD357 (AITR/GITR)	eBioAITR	5875	■		■	■		
CD360	2SX21R	3601			■			
CD363	SW4GYPP	3639					■	
CD366 (TIM3)	F38-2E2	3109	■		■			■
CD368 (Clec6)	9B9	9113					■	
CD369 (Clec7A, Dectin-1)	15E2	9856			■		■	
c-ErbB3/HER3	SGP1	6555			■			
c-Maf	sym0F1	9855			■		■	
Cutaneous Lymphocyte Antigen	HECA-452	9857					■	
CX3CR1	2A9-1	6099			■			
CXCL1 (GRO alpha)	KTYFLF	7515					■	
CXCL10 (IP-10)	4NY8UN	9744			■			
EBI3 (IL-27 subunit)	ebic6	7358			■			
EGFR	me1B3	9509					■	
Egr1	HEGR1DS	9851			■			
Eomes	WD1928	4877			■	■	■	■
ERK 1, ERK 2	MILAN8R	9109			■	■		
Fc epsilon Receptor 1 alpha (FcεRI)	AER-37 (CRA1)	5899	■		■	■		
Foxp3	150D/E4	4774					■	
Foxp3	236A/E7	4777	■				■	
Foxp3	PCH101	4776	■			■	■	
Galectin-9	9M1-3	9116					■	
Gata-3	TWAI	9966			■	■	■	
GARP	G14D9	9882			■		■	
G-CSF	8F5CSF	7351					■	
Glycoprotein VI	HY101	9813					■	
Granzyme A	CB9	9177					■	
Granzyme K	G3H69	8897			■		■	
Granzyme M	4B2G4	9774					■	
phospho-H2AX (S139)	CR55T33	9865			■		■	
Helios	22F6	9883	■		■	■		■
HLA-A2	BB7.2	9876			■			
HLA-ABC	W6/32	9983			■			
HLA-DR	L243	9952	■		■			
HLA-DR	LN3	9956	■					■
HLA-G	87G	9957			■			
IDO	eyedio	9477			■		■	
IFN gamma	4S.B3	7319	■	■		■	■	■
Ig kappa light chain	TB28-2	9970	■					
IgD	IA6-2	9868			■			
IgM	SA-DA4	9998	■		■			
IL-2	MQ1-17H12	7029	■		■	■		
IL-6	MQ2-13A5	7069	■		■			
IL-8	8CH	8088	■		■			
IL-9	MH9A4	7097					■	
IL-9	MH9D1	7098	■		■			
IL-10	JES3-9D7	7108	■		■		■	
IL-12	SNKY35	7359					■	
IL-12/IL-23	C8.6	7129	■				■	
IL-12/IL-23	eBioHP40 (HP40, HP-40)	7235	■		■		■	

Human (continued)	Clone	Cat. No.	Violet laser		Blue laser	Blue/Green/ Yellow- green laser	Red laser	
			eFluor® 450	eFluor® 506	PerCP- eFluor® 710	PE- eFluor®610	eFluor® 660	APC- eFluor® 780
IL-17A	eBio64CAP17	7178						
IL-17A	eBio64DEC17	7179	■	■		■	■	■
IL-17AF	20LJS09	9179	■					
IL-17F	SHLR17	7169	■		■		■	
IL-17FF	WU24A4P	9178			■		■	
IL-21	eBio3A3-N2 (3A3-N2)	7219					■	
IL-22	22URTI	7229	■		■		■	
IL-23 p19	23dcdp	7823			■		■	
IL-27 p28	3D1p28	8277					■	
IL-31	31SNEZE	9319					■	
IRF4	3E4	9858	■		■	■	■	
IRF5	ALYSCLN	9698					■	
IRF8	V3GYWCH	9852			■		■	
Ki-67	20Raj1	5699	■	■	■	■	■	
KLRG1	13F12F2	5893			■		■	■
LAMP5	34.2	9778					■	
LAP	FNLAP	9829	■		■		■	
LCK (pY505)	SRRCHA	9076			■		■	
Mature macrophage marker	eBio25F9 (25F9)	0115					■	
Myeloperoxidase (MPO)	MPO455-8E6	1299	■				■	
NF-kappa B p65 (pS529)	B33B4WP	9863			■		■	
Osteopontin	2F10	9096					■	
p38 MAPK (pT180/Y182)	4NIT4KK	9078			■		■	
PARP	HLNC4	6668	■				■	
Perforin	dG9 (delta G9)	9994	■		■		■	
Phosphotyrosine	pY20	5001	■		■		■	
Podoplanin	NZ-1.3	9381			■		■	
Progesterone Receptor	KMC912	9764					■	
S100A8	CF-145	9745					■	
S6 Ribosomal Protein	cupk43k	9007	■		■		■	
Semaphorin 4A	5E3	9753			■		■	
SLAM Associated Protein (SAP)	XLP-1D12	9787					■	
Sox2	Btjce	9811					■	
Src (pY418)	SC1T2M3	9034			■		■	
SSEA-1	eBioMC-480 (MC-480)	8813			■		■	
SSEA-4	eBioMC-813-70 (MC-813-70)	8843			■		■	
STAT1 (pY701)	KIKSI0803	9008	■				■	
STAT3 (pY705)	LUVNKLA	9033	■				■	
STAT5 (pY694)	SRBCZX	9010			■	■	■	
STAT6 (pY641)	CHI2S4N	9013			■	■	■	
Survivin (BIRC5)	STLALYV	9176			■		■	
T-bet	eBio4B10 (4B10, 4-B10)	5825					■	
gamma delta TCR	B1.1	9959			■		■	
TIGIT	MBSA43	9500			■		■	
TL1A	Tandys1a	7911			■		■	
TNF alpha	MAB11	7349	■			■	■	
mTOR (pS2448)	MRRBY	9718	■		■		■	
TRA-1-60 (podocalyxin)	TRA-1-60	8863			■		■	
TSLP Receptor	eBio1A6 (1A6)	5499			■		■	
V alpha 24 J alpha 18 TCR	6B11	5806	■		■		■	
V beta 8 TCR	JR-2	9890	■				■	
ZAP-70/SYK (pY319/Y352)	n3kobu5	9006			■		■	



Mouse	Clone	Cat. No.	Violet laser		Blue laser	Blue/Green/ Yellow- green laser	Red laser	
			eFluor® 450	eFluor® 506	PerCP- eFluor® 710	PE- eFluor®610	eFluor® 660	APC- eFluor® 780
AHR	4MEJ	5925						
Aiolos	8B2	5789						
AKT (pS473)	SDRNR	9715	■					
Bcl-2	10C4	6992	■					
Bcl-6	BCL-DWN	5453			■			
BP-1	6C3	5891			■			
BTK/ITK (pY551/Y551)	M4G3LN	9015			■			
beta-Catenin	15B8	2567					■	
CCL3 (MIP-1 alpha)	DNT3CC	7532			■			
CD1d	1B1	0011	■		■			
CD3	17A2	0032	■	■	■			■
CD3e	145-2C11	0031	■			■		■
CD3e	eBio500A2 (500A2)	0033	■		■			■
CD4	GK1.5	0041	■		■	■		■
CD4	RM4-5	0042	■	■	■	■		■
CD5	53-7.3	0051	■					■
CD8a	53-6.7	0081	■	■	■	■		■
CD8b	eBioH35-17.2 (H35-17.2)	0083	■		■			■
CD9	eBioKMC8 (KMC8)	0091	■					
CD11a	M17/4	0111	■		■			
CD11b	M1/70	0112	■	■		■		■
CD11c	N418	0114	■	■		■		■
CD14	Sa2-8	0141			■			
CD16/CD32	93	0161	■		■			
CD19	eBio1D3 (1D3)	0193	■	■		■		■
CD21/CD35	eBio8D9	0211						■
CD21/CD35	eBio4E3 (4E3)	0212	■		■			
CD23	B3B4	0232	■		■			■
CD24	M1/69	0242	■		■			■
CD25	PC61.5	0251	■			■		■
CD25	eBio7D4 (7D4)	0252					■	
CD25	eBio3C7 (3C7)	0253	■					
CD27	LG.7F9	0271			■			■
CD29	eBioHMB1-1 (HMB1-1)	0291	■		■			■
CD31 (PECAM-1)	390	0311	■		■			
CD34	RAM34	0341	■				■	
CD38	90	0381	■		■			
CD39	24DMS1	0391			■			
CD40	1C10	0401			■			
CD41	eBioMWRReg30 (MWRReg30)	0411	■		■			■
CD42d	1C2	0421			■			
CD44	IM7	0441	■			■		■
CD45	30-F11	0451	■	■		■		■
CD45.1	A20	0453	■	■		■		■
CD45.2	104	0454	■	■		■		■
CD45R (B220)	RA3-6B2	0452	■	■	■	■		■
CD47	miap301	0471			■			
CD48	HM48-1	0481	■		■			■
CD49b (Integrin alpha 2)	DX5	5971	■	■		■		■
CD49d (Integrin alpha 4)	R1-2	0492			■			
CD49f (Integrin alpha 6)	eBioGoH3 (GoH3)	0495	■		■			
CD62L (L-selectin)	MEL-14	0621	■					■
CD62P (P-Selectin)	Psel.KO2.3	0626			■			
CD63	NVG-2	0631			■			
CD68	FA-11	0681					■	
CD69	H1.2F3	0691	■					■
CD70	FR70	0701			■			
CD71 (Transferrin Receptor)	R17217 (RI7 217.1.4)	0711	■		■			
CD73	eBioTY/11.8 (TY/11.8)	0731	■		■			
CD79	24C2.5	0791					■	
CD80 (B7-1)	16-10A1	0801	■		■			
CD83	Michel-17 (Michel17)	0831					■	
CD86 (B7-2)	GL1	0862	■					
CD90.1 (Thy-1.1)	HIS51	0900	■					■
CD90.2 (Thy-1.2)	53-2.1	0902	■					■
CD90.2 (Thy-1.2)	30-H12	0903			■			
CD93 (AA4.1)	AA4.1	5892	■					
CD94	18d3	0941	■					
CD95 (APO-1/Fas)	15A7	0951			■			
CD102 (ICAM-2)	3C4 (mIC2/4)	1021	■					
CD103 (Integrin alpha E)	2E7	1031	■		■			
CD105 (Endoglin)	MJ7/18	1051	■					

Mouse (continued)	Clone	Cat. No.	Violet laser		Blue laser	Blue/Green/ Yellow- green laser	Red laser	
			eFluor® 450	eFluor® 506	PerCP- eFluor® 710	PE- eFluor®610	eFluor® 660	APC- eFluor® 780
CD106 (VCAM-1)	429	1061	■				■	
CD107a (LAMP-1)	eBio1D4B (1D4B)	1071	■		■		■	
CD107b (LAMP-2)	eBioABL-93	1072					■	
CD115 (c-fms)	AFS98	1152			■	■		■
CD117 (c-kit)	2B8	1171	■		■	■		■
CD117 (c-kit)	ACK2	1172						■
CD122	TM-b1 (TM-beta1)	1222	■		■			
CD127	A7R34	1271	■				■	■
CD127	eBioSB/199 (SB/199)	1273	■		■			
CD133 (Prominin-1)	13A4	1331			■			
CD134 (OX40)	OX-86	1341			■			
CD135 (Flt3)	A2F10	1351			■			
CD137 (4-1BB)	17B5	1371	■		■			
CD137 Ligand (4-1BB Ligand)	TKS-1	5901			■			
CD144 (VE-Cadherin)	eBioBV13 (BV13)	1441	■		■		■	
CD146	P1H12	1469	■				■	
CD150	mShad150	1502	■		■			
CD152 (CTLA-4)	UC10-4B9	1522				■		
CD154 (CD40 Ligand)	MR1	1541	■		■			
CD160	eBioCNX46-3 (CNX46-3)	1601					■	
CD169 (Siglec-1)	SER-4	5755					■	
CD170 (Siglec F)	1RNM44N	1702			■		■	
CD172a (SIRP alpha)	P84	1721			■			
CD178 (Fas Ligand)	MFL3	5911			■			
CD184 (CXCR4)	2B11	9991	■		■	■		
CD185 (CXCR5)	SPRCL5	7185			■	■		
CD195 (CCR5)	HM-CCR5 (7A4)	1951			■			
CD196 (CCR6)	sirx6	7196					■	
CD197 (CCR7)	4B12	1971	■					■
CD199 (CCR9)	eBioCW-1.2 (CW-1.2)	1991	■		■			
CD200	OX90	5200			■		■	
CD200 Receptor	OX110	5201			■			
CD201 (EPCR)	eBio1560 (1560)	2012			■			
CD205	205yekta	2051			■	■		
CD207 (Langerin)	eBioRMUL.2	2073					■	
CD209 (DC-SIGN), CD209a	MMD3	2094					■	
CD215 (IL-15 Receptor alpha)	DNT15Ra	7149			■			
CD218a (IL-18 Receptor alpha)	P3TUNYA	5183	■		■			
CD223 (Lag-3)	eBioC9B7W (C9B7W)	2231	■		■			
CD244.1	C9.1	2440			■			
CD252 (OX40 Ligand)	RM134L	5905			■			
CD272 (BTLA)	6F7	5950			■			
CD273 (B7-DC)	122	9972			■			
CD274 (B7-H1)	MIH5	5982			■			
CD275 (B7-H2)	HK5.3	5985					■	
CD278 (ICOS)	15F9	5890			■			
CD279 (PD-1)	RMP1-30	9981	■		■			
CD279 (PD-1)	J43	9985	■		■	■		■
CD281 (TLR1)	eBioTR23 (TR23)	9011					■	
CD282 (TLR2)	6C2	9021					■	
CD301b (MGL2)	11A10-B7	3011					■	
CD304	3DS304M	3041	■		■	■		
CD314 (NKG2D)	CX5	5882			■	■		
CD317 (BST2/PDCA-1)	eBio927	3172	■		■	■		
CD324 (E-cadherin)	DECMA-1	3249			■		■	
CD326 (EpCAM)	G8.8	5791	■		■		■	
CD335 (Nkp46)	29A1.4	3351	■		■	■	■	■
CD354	TR3MBL1	3541					■	
CD357 (GITR)	DTA-1	5874	■		■			
CD366 (TIM3)	8B.2C12	5871	■					
CD369 (Clec7A, Dectin-1)	bg1fpj	5859			■			
CD370 (Clec9A)	42D2	5975			■			
c-Maf	sym0F1	9855			■		■	
c-Rel	1RELAH5	6111					■	
CXCL9 (MIG)	MIG-2F5.5	3009					■	
Dendritic Cell Marker (33D1)	33D1	5884			■		■	
DO11.10 TCR	KJ1-26 (KJ126, KJ1-26, KJ126)	5808			■			
Endomucin	eBioV.7C7 (V.7C7)	5851					■	
Eomes	Dan11mag	4875	■		■	■	■	
Eos	ESB7C2	5758					■	
ERK 1, ERK 2	MILAN8R	9109			■	■		
F4/80 Antigen	BM8	4801	■	■		■	■	■

Mouse (continued)	Clone	Cat. No.	Violet laser		Blue laser	Blue/Green/ Yellow-green laser	Red laser	
			eFluor® 450	eFluor® 506	PerCP- eFluor® 710	PE- eFluor®610	eFluor® 660	APC- eFluor® 780
Fc epsilon Receptor 1 alpha (FceRI)	MAR-1	5898	■		■	■		■
Foxp3	FJK-16s	5773	■	■		■	■	
Galectin-3	eBioM3/38 (M3/38)	5301					■	
GARP	YGIC86	9891	■		■			
Gata-3	TWAJ	9966			■	■	■	
G-CSF	9B4CSF	7353					■	
GL7 (T and B Cell Activation Marker)	GL-7 (GL7)	5902	■		■		■	
GP49 receptor	H1.1	5784					■	
Gpmb	CTSREVL	5708					■	
Granzyme A	GzA-3G8.5	5831	■		■			
Granzyme B	NGZB	8898	■		■	■	■	
phospho-H2AX (S139)	CR55T33	9865			■	■	■	
Helios	22F6	9883	■		■	■		■
I kappa B zeta	LK2NAP	6801			■			
IDO	miDO-48	9473			■		■	
IFN gamma	XMG1.2	7311	■			■	■	
IgD	11-26c (11-26)	5993	■		■			■
IgG	polyclonal	4010			■		■	
IgG1	M1-14D12	4015	■		■	■	■	
IgG2a	m2a-15F8	4210			■			
IgM	II/41	5790	■		■	■	■	■
IgM	eB121-15F9	5890	■					
IL-1 beta	NJTEN3	7114	■		■			■
IL-2	JES6-5H4	7021	■					
IL-4	11B11	7041			■			
IL-6	MP5-20F3	7061	■		■			
IL-9	RM9A4	8091					■	
IL-12 p35	4D10p35	7352					■	
IL-12/IL-23 p40	C17.8	7123	■				■	
IL-13	eBio13A	7133	■		■	■	■	
IL-17A	eBio17B7	7177	■	■	■	■	■	
IL-17AF	B8KN8R	9171					■	
IL-17F	eBio18F10	7471			■		■	
IL-21	FFA21	7211					■	
IL-21	mhalx21	7213					■	
IL-22	1H8PWSR	7221			■			
IL-23	fc23cpg	7023			■		■	
IL-25R (IL-17RB)	MUNC33	7361					■	
IL-33R (ST2)	RMST2-33	9333			■			
IL-33R (ST2)	RMST2-2	9335			■			
Integrin alpha 4 beta 7 (LPAM-1)	DATK32 (DATK-32)	5887			■			
IRF4	3E4	9858	■		■	■	■	
IRF8	V3GYWCH	9852			■			
Jagged 2	HMJ2-1	3392					■	
Ki-67	SolA15	5698	■	■	■	■	■	
KLRG1	2F1	5893	■	■	■	■		■
LAP	TW7-16B4	9821			■			
LCK (pY505)	SRRCHA	9076			■		■	
Ly-49D	eBio4E5 (4E5)	5782			■		■	
Ly-49E/F	CM4	5848			■			
Ly-49G2	eBio4D11 (4D11)	5781			■			
Ly-6A/E (Sca-1)	D7	5981				■		
Ly-6C	HK1.4	5932	■					■
Ly-6D	49-H4	5974	■		■			
Ly-6G (Gr-1)	1A8-Ly6g	9668			■	■		
Ly-6G (Gr-1)	RB6-8C5	5931	■			■	■	■
Lyve-1	ALY7	0443					■	
MHC Class I (H-2Dd)	28-14-8	5999	■					
MHC Class I (H-2Kd)	AF6-88.5.5.3	5958	■		■			
MHC Class I (H-2Kd)	SF1-1.1.1	5957	■		■			
MHC Class I (H-2Kd/H-2Dd)	34-1-2S	5998	■		■			
MHC Class I (H-2Kk)	AF3-12.1.3	5940	■					
MHC Class II (I-A/I-E)	M5/114.15.2	5321	■		■	■		■
MHC Class II I-Ab	AF6-120.1	5320	■		■			
mTOR (pS2448)	MRRBY	9718	■		■		■	
NK1.1	PK136	5941	■			■		■
NKG2A/C/E	20d5	5896			■			
NKG2AB6	16a11	5897			■			
NOS2	CXNFT	5920				■		
Nur77	12.14	5965			■			
OVA257-264 (SIINFEKL)	eBio25-D1.16 (25-D1.16)	5743			■			
PD-1H	MH5A	5919			■			

Mouse (continued)	Clone	Cat. No.	Violet laser		Blue laser	Blue/Green/ Yellow- green laser	Red laser	
			eFluor® 450	eFluor® 506	PerCP- eFluor® 710	PE- eFluor®610	eFluor® 660	APC- eFluor® 780
Phosphotyrosine	pY20	5001	■		■		■	
Podoplanin	eBio8.1.1 (8.1.1)	5381					■	
ROR gamma (t)	B2D	6981			■	■		
S6 Ribosomal Protein	cupk43k	9007	■		■			
Semaphorin 4A	5E3	9753			■			
Siglec G	SH2.1	5833			■			
Siglec H	eBio440c	0333	■		■		■	
Sox2	Btjce	9811					■	
Src (pY418)	SC1T2M3	9034			■		■	
SSEA-1	eBioMC-480 (MC-480)	8813			■		■	
STAT3 (pY705)	LUVNKLA	9033	■					
STAT5 (pY694)	SRBCZX	9010			■	■		
STAT6 (pY641)	CHI254N	9013			■	■		
T-bet	eBio4B10 (4B10, 4-B10)	5825					■	
TCR beta	H57-597	5961	■	■		■		■
gamma delta TCR	eBioGL3 (GL-3, GL3)	5711	■		■			
TER-119	TER-119	5921	■			■		■
Themis	1TMYS	5918					■	
TIGIT	GIGD7	9501			■		■	
TIM4	54 (RMT4-54)	5866			■			
TL1A	Tandys1a	7911			■			
TNF alpha	MP6-XT22	7321	■		■	■		
TOX	TXRX10	6502					■	
V alpha 2 TCR	B20.1	5812	■		■			■
V alpha 3.2 TCR	RR3-16	5799			■			
V alpha 11 TCR	RR8-1	5800			■			
V beta 5.1/5.2 TCR	MR9-4	5796	■		■			
V beta 6 TCR	RR4-7	5795			■			
V beta 8.1, 8.2 TCR	KJ16-133 (KJ-16, KJ16, KJ-16)	5813			■			
V beta 9 TCR	MR10-2	5823	■					
V beta 11 TCR	RR3-15	5827			■			
V beta 12 TCR	MR11-1	5798			■			
V beta 13 TCR	MR12-3	5797			■			
V delta 4 TCR	GL2	5702					■	
V gamma 2 TCR	UC3-10A6	5828			■			
ZAP-70/SYK (pY319/Y52)	n3kobu5	9006			■			
3G11 Sialoganglioside Antigen	eBio3G11 (SM3G11, 3G11)	5443					■	

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