Fast results from DNA to data

Platinum II *Taq* Hot-Start DNA Polymerase

Invitrogen™ Platinum™ II *Taq* Hot-Start DNA Polymerase is designed to get you to your PCR results, faster. A universal primer annealing feature simplifies optimization steps and allows co-cycling of all assays. The unique combination of innovative buffer, high-performance *Taq* DNA polymerase, and stringent hot-start technology delivers robust PCR results, even in the toughest applications.

Features

- **Universal primer annealing at 60°C**—reduces tedious optimization steps and enables co-cycling of all assays
- **Inhibitor resistance and 4x faster DNA synthesis**—allows fast cycling and successful amplification, even in the presence of inhibitors
- **Invitrogen™ Platinum™ hot-start technology**—offers superior specificity, sensitivity, and yields; allows for room-temperature reaction setup
- **Green buffer formats**—help reduce pipetting errors with direct gel loading

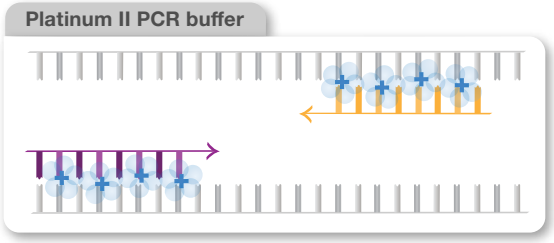

Figure 1. Universal primer annealing. The innovative Platinum II PCR buffer contains molecules that isostabilize primer–template structures, reducing mispriming and enabling universal annealing of primers with different melting temperatures.

Platinum II *Taq* Hot-Start DNA Polymerase is ideal for:

- Amplification of low-input and low-quality DNA
- Direct PCR with whole blood
- Genotyping
- Sanger sequencing
- GC-rich PCR
- Colony PCR
- Broad-range PCR of bacterial 16S rRNA genes
- Fast PCR
- High-throughput PCR

Find out more about using Platinum II *Taq* Hot-Start DNA Polymerase for:

- High-throughput PCR
- Direct PCR with blood
- Mouse genotyping
- Bacterial DNA detection
- Multiplex PCR
- SNP detection

Download the application notes at
thermofisher.com/platinumiitaq

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Save time and streamline your workflow with a universal protocol

PCR assays with conventional DNA polymerase

Platinum II *Taq* Hot-Start DNA Polymerase allows universal annealing temperature and flexible extension for co-cycling of all assays

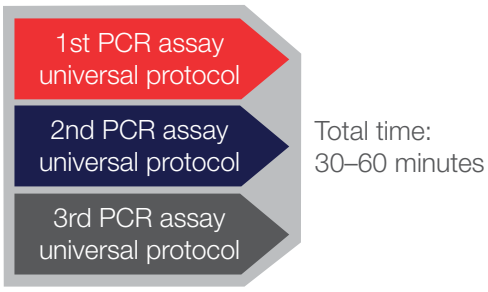

Figure 2. Save time with a universal protocol. Platinum II *Taq* Hot-Start DNA Polymerase allows different PCR assays to be cycled together, using the same protocol with universal primer annealing temperature and extension step selected for the longest fragment to be amplified. Platinum II *Taq* Hot-Start DNA Polymerase is fast, delivering PCR results in as little as 30 minutes.

Technical specifications	
Universal annealing protocol	Yes
Flexible extension step*	Yes
Speed	15 sec/kb
Inhibitor resistance	Yes
Target length	Up to 5 kb
Hot-start modification	Antibody-mediated
Fidelity versus *Taq* DNA Polymerase	1x
Blunt or 3´-A end	3´-A
Benchtop stability of assembled PCR reactions	24 hr
GC-rich amplification	Yes
Residual bacterial gDNA	<1 copy/ enzyme unit
Formats	
Master mix	Colorless/green**
Stand-alone enzyme	Colorless/green†

* The extension step can be extended up to 60 sec/kb without affecting specificity.

** Direct gel loading with green buffer options.

† Green buffer available as separate item for use with stand-alone enzyme.

Ordering information

Product	Quantity	Cat. No.
Platinum II *Taq* Hot-Start DNA Polymerase	100 reactions	14966-001
	500 reactions	14966-005
	2,500 reactions	14966-025
Platinum II Hot-Start PCR Master Mix (2X)	50 reactions	14000-012
	200 reactions	14000-013
	1,000 reactions	14000-014
Platinum II Hot-Start Green PCR Master Mix (2X)	50 reactions	14001-012
	200 reactions	14001-013
	1,000 reactions	14001-014

Tip: Use Applied Biosystems™ thermal cyclers and PCR plastics to deliver reliable, enhanced PCR performance. Learn more at **thermofisher.com/pcrworkflow**

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