

GoTaq® Family
Reaction Buffers
qPCR
Hot Start PCR
Standard PCR

GoTaq® Amplification Family

High Performance Buffers

GoTaq® Reaction Buffers

qPCR

GoTaq® qPCR Master Mix

Hot Start PCR

GoTaq® Hot Start Polymerase

GoTaq® Hot Start Green Master Mix

GoTaq® Hot Start Colorless Master Mix

Standard PCR

GoTaq® Flexi DNA Polymerase

GoTaq® DNA Polymerase

GoTaq® Green Master Mix

GoTaq® Colorless Master Mix

GoTaq® PCR Core Systems I & II



GoTaq® DNA Polymerase comes in a variety of formulations designed to give you maximum flexibility, control and convenience

GoTaq® Family
Reaction Buffers
qPCR
Hot Start PCR
Standard PCR

GoTaq® Reaction Buffers

High-performance reaction buffer for robust, reliable performance



1X Green GoTaq® Reaction Buffer electrophoresis show separation of the yellow and blue dyes.

GoTaq® Green Reaction Buffer

Go from Thermal Cycler to Gel Analysis Directly: Green Reaction Buffer is both a PCR reaction buffer and a gel loading solution.

GoTaq® Colorless Reaction Buffer

Go from Thermal Cycler to Fluorescent Analysis Directly: Colorless reaction buffers allow downstream analysis with fluorescent detection

Overview

Sensitivity

Fluorescence

Broad Dynamic Range

Reproducibility

Stability

Instrument Compatibility

Order Product

More Information

GoTaq® qPCR Master Mix delivers higher sensitivity for detecting a single copy gene

- **Early C_q and detection of low copy targets**
- **Enhanced stability for automated setup**
- **Direct substitute for SYBR® Green I products**
- **The robust, reliable performance of GoTaq® Hot Start**
- **The Promega PCR Performance Guarantee**

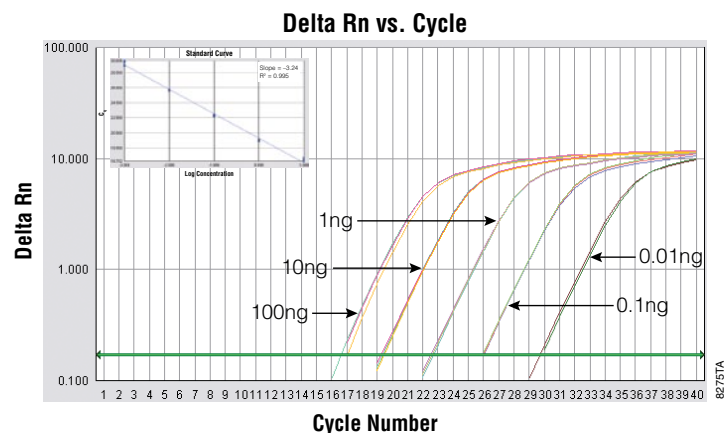


GoTaq® qPCR Master Mix contains a new proprietary fluorescent DNA binding dye that exhibits greater fluorescence than SYBR® Green I.

The GoTaq® qPCR Master Mix is a pre-mixed, ready-to-use solution containing all the necessary components formulated to achieve superior dye-based real-time PCR in a 2X mix.

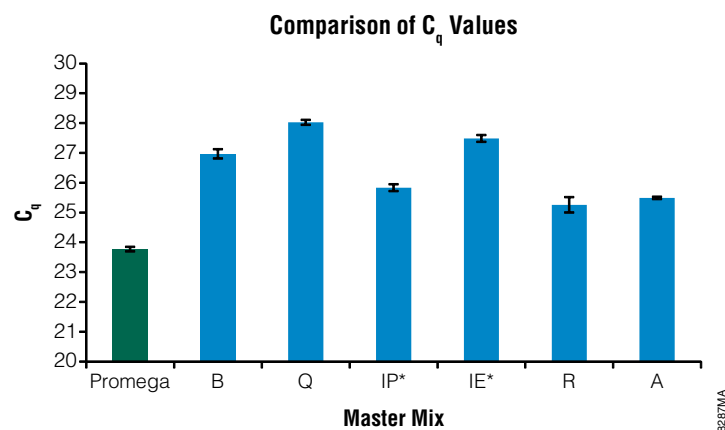
- Overview
- Sensitivity
- Fluorescence
- Broad Dynamic Range
- Reproducibility
- Stability
- Instrument Compatibility
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- More Information

GoTaq® qPCR Master Mix provides high sensitivity for detecting a single copy gene



qPCR with single copy detection.

[Larger View and Details](#)



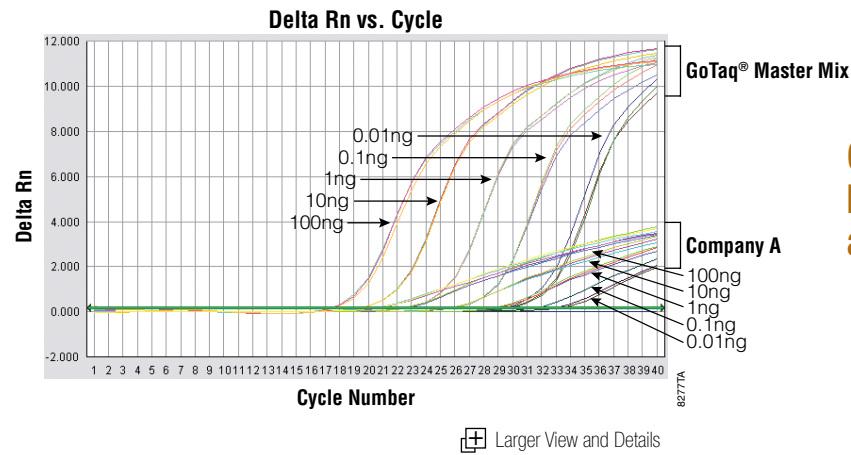
GoTaq® qPCR shows earlier C_q than leading competitors.

[Larger View and Details](#)

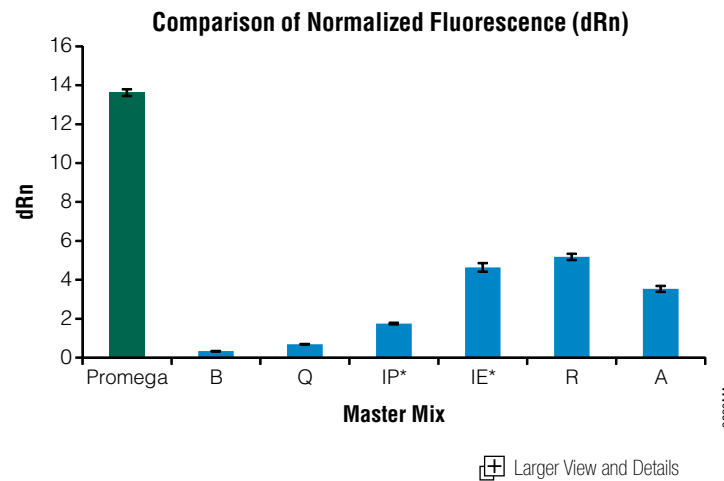


- Overview
- Sensitivity
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GoTaq® qPCR Master Mix outperforms other dye-based master mixes



GoTaq® qPCR shows significantly higher fluorescence and earlier C_q at all template levels.

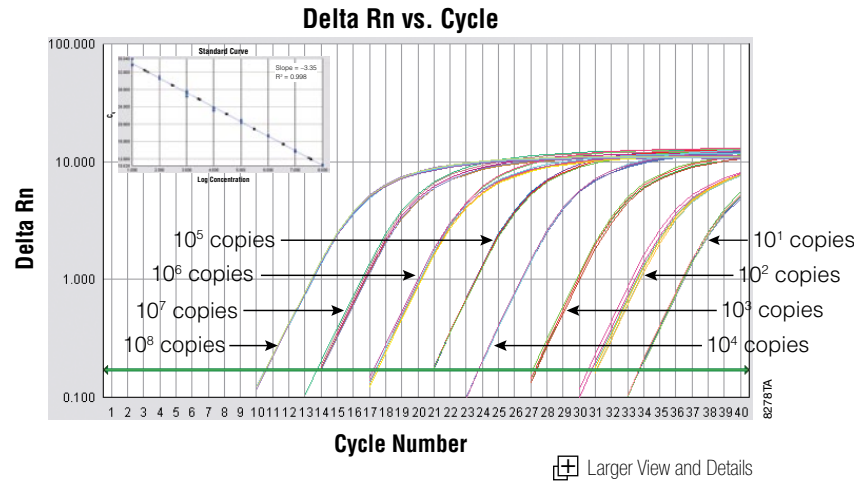


GoTaq® qPCR shows brighter fluorescent signal than leading competitors.

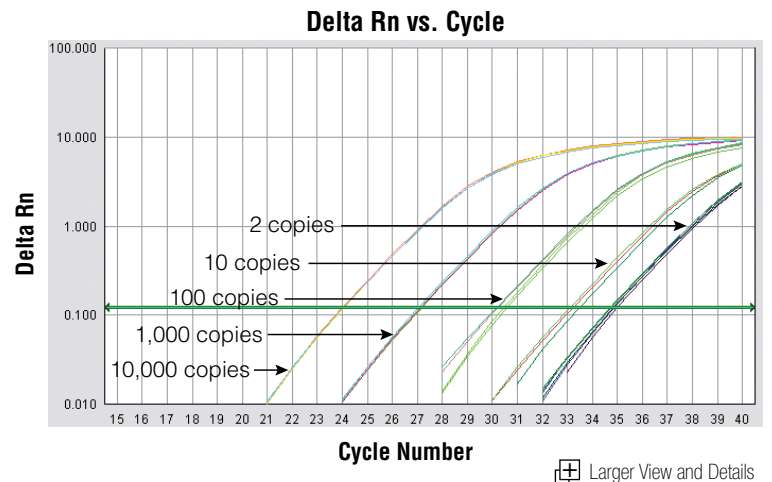


- Overview
- Sensitivity
- Fluorescence
- Broad Dynamic Range**
- Reproducibility
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Excellent amplification efficiency and accurate quantification over a broad dynamic range



Amplification of kanamycin from plasmid DNA over 8 logs orders.

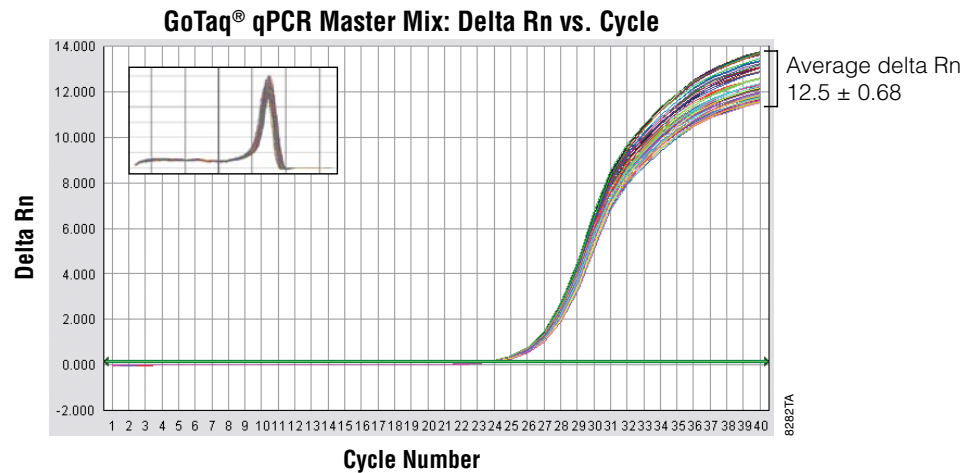
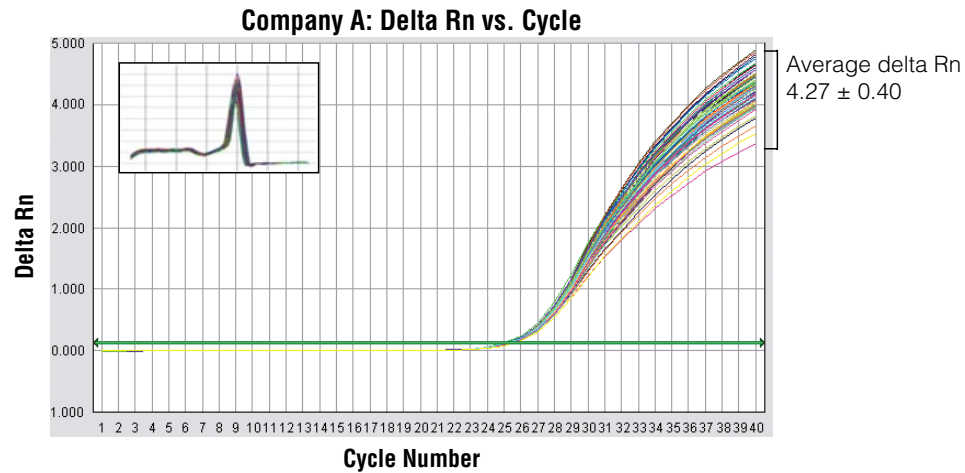


Amplification of kanamycin from plasmid DNA shows detection of 2 copies.



- Overview
- Sensitivity
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Exceptional reproducibility across a 96-well plate



GoTaq® qPCR shows tighter distribution.

 Larger View and Details

Overview

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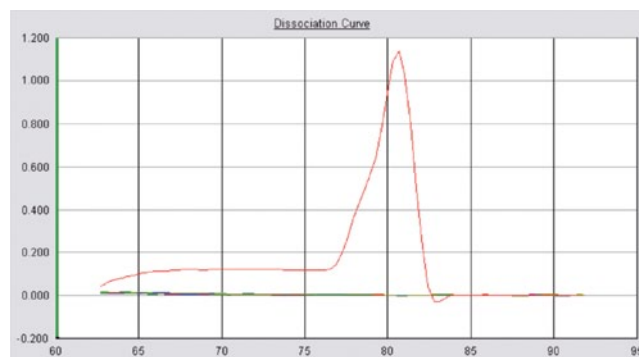
Instrument Compatibility

Order Product

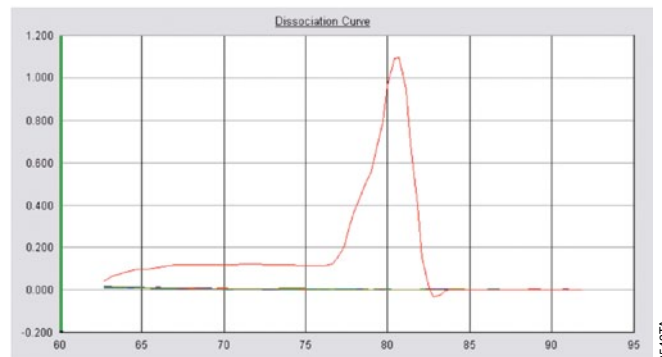
More Information

Superior Stability for Automated Setup

GoTaq® qPCR is stable after 24 hours at room temperature



Hot Start - 0 hrs



Hot Start - 24 hrs

 Larger View and Details

Overview

Sensitivity

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Instrument Compatibility

Order Product

More Information

Instrument Compatibility

GoTaq® qPCR is compatible with any real-time instrument capable of detecting SYBR® Green I or FAM™ dye.

Use GoTaq® qPCR Master Mix directly ►

**Require addition of 100X CXR.
Reference Dye to 1X per reaction ►**

**May require addition of
fluorescein as reference dye ►**

- Overview
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Order Product

Product	Size	Catalog
GoTaq® qPCR Master Mix ^(a,b,c)	200 reactions	A6001
	1000 reactions	A6002

For in vitro research use only. Not for use in diagnostic procedures.
 Reaction size is based on a 50µl reaction volume of mix (2X).

What's included?

- 2X GoTaq® qPCR Master Mix (includes GoTaq® Hot Start Polymerase, dNTPs, Reaction Buffer, dsDNA binding dye, MgCl₂ and CRX reference dye)
- 100X CRX Reference Dye
- Nuclease-Free Water

The PCR Performance Guarantee: If you are not completely satisfied with the performance of this product, we will send a replacement or refund to your account.



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Overview

Sensitivity

Fluorescence

Broad Dynamic Range

Reproducibility

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More Information



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More Information



Technical Manual TM318



Quick Protocol FB103



Video Protocol..... VPA6001



Amplification Product Selector

Overview

GoTaq® Hot Start Polymerase

GoTaq® Green Master Mix

GoTaq® Colorless Master Mix

Order Product

More Information

GoTaq® Hot Start Polymerase delivers robust, reliable performance

- Higher Specificity
- Quick 2-Minute Activation
- Robust Amplification
- Direct-to-Gel Applications
- Choose Enzyme or Master Mixes
- PCR Performance Guarantee



Overview

GoTaq® Hot Start Polymerase

GoTaq® Green Master Mix

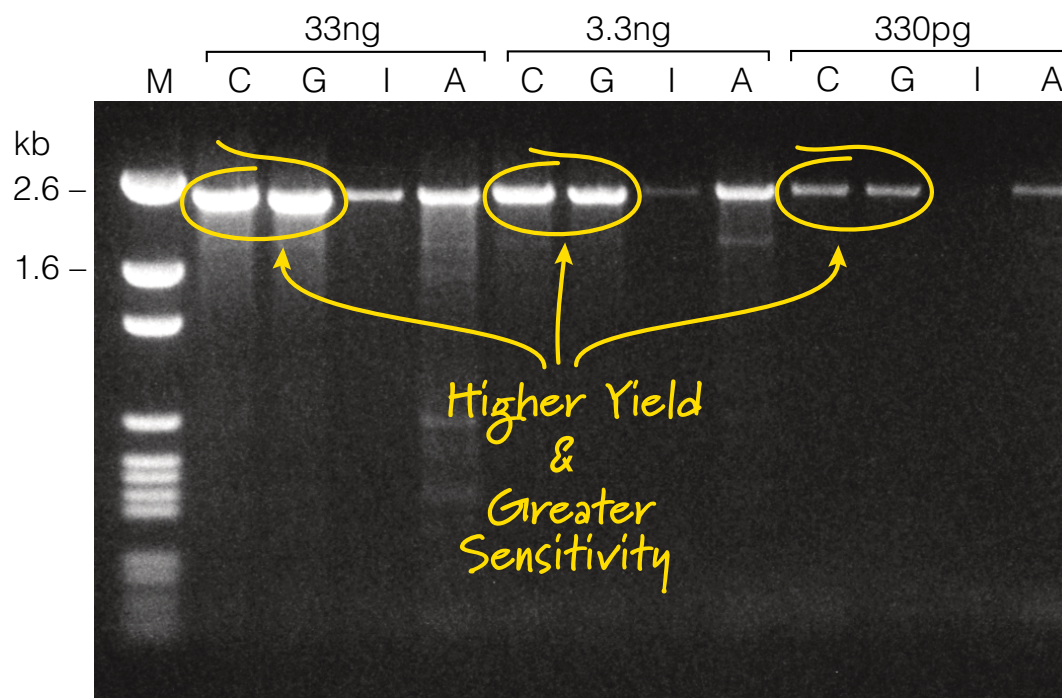
GoTaq® Colorless Master Mix

Order Product

More Information

GoTaq® Hot Start Polymerase

The proven, robust amplification and sensitivity of GoTaq® DNA Polymerase now with a built-in hot start to deliver even more superior results.



Ease of Use:

Set up your reaction at room temperature.

Higher Specificity:

Minimize mispriming and primer-dimers.

Higher Yield:

Save time and ensure maximum enzyme activity with quick 2-minute activation.

Direct-to-Gel Convenience:

Green GoTaq® Flexi Buffer serves as both reaction buffer and gel loading solution.

Overview

GoTaq® Hot Start Polymerase

GoTaq® Green Master Mix

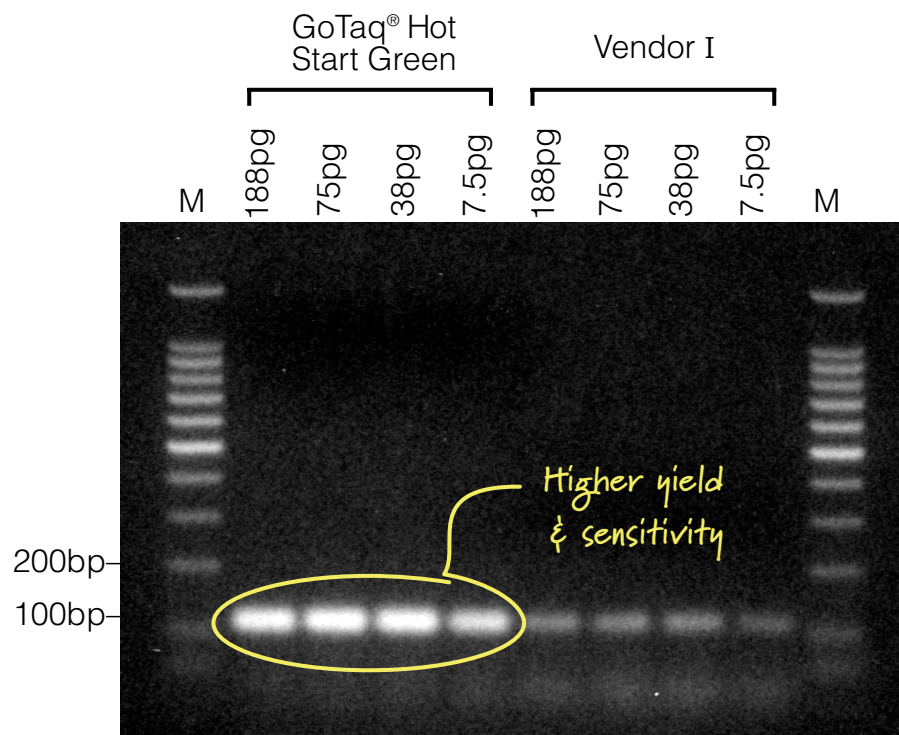
GoTaq® Colorless Master Mix

Order Product

More Information

GoTaq® Hot Start Green Master Mix

Better performance. More Specific. Fast room temperature set-up.



Direct-to-Gel Convenience:
Green GoTaq® Buffer serves as both reaction buffer and gel loading solution.

Convenience:
Simply add primers and template.

Quick Activation:
Only 2-minute activation, saves time and ensure maximum enzyme activity.

Higher Specificity:
Reduces mispriming and primer-dimer formation.

Robust Amplification:
GoTaq® High-Performance Buffers outperform regular Taq enzymes.

Overview

GoTaq® Hot Start Polymerase

GoTaq® Green Master Mix

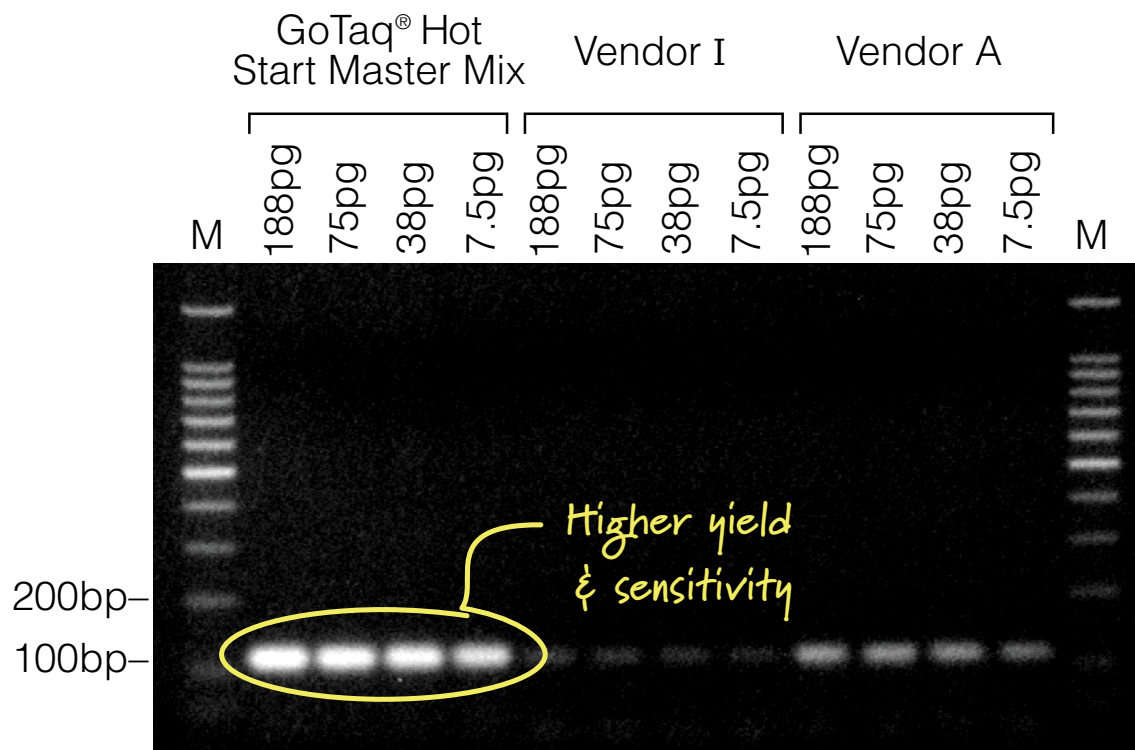
GoTaq® Colorless Master Mix

Order Product

More Information

GoTaq® Hot Start Colorless Master Mix

Better performance. More Specific. Fast room temperature set-up.



Convenience:

Simply add primers and template.

Quick Activation:

Only 2-minute activation, saves time and ensure maximum enzyme activity.

Higher Specificity:

Reduces mispriming and primer-dimer formation.

Robust Amplification:

GoTaq® High-Performance Buffers outperform regular Taq enzymes.

Overview

GoTaq® Hot Start Polymerase

GoTaq® Green Master Mix

GoTaq® Colorless Master Mix

Order Product

More Information

Ordering Information

Product	Size	Catalog Number
GoTaq® Hot Start Polymerase ^(a, b, c)	100u	M5001
	500u	M5005
	2,500u	M5006
	10,000u	M5008
GoTaq® Hot Start Green Master Mix ^(a, b, c)	100 reactions	M5122
	1,000 reactions	M5123
GoTaq® Hot Start Colorless Master Mix ^(a, b, c)	100 reactions	M5132
	1,000 reactions	M5133

For in vitro research use only. Not for use in diagnostic procedures.

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Overview

GoTaq® Hot Start Polymerase

GoTaq® Green Master Mix

GoTaq® Colorless Master Mix

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www.promega.com



References



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Wieczorek, D., *et al.* (2008) GoTaq® Hot Start Polymerase for mouse genotyping. *eNotes/ap0100*.



Knoche, K. and Wheeler, S. (2008) Use the new GoTaq® Hot Start Green and Colorless Master Mixes for easy, convenient PCR. *eNotes/ap0102*.



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[Citations via PubMed](#)

Resources

Amplification Product Selector: Choose the right product for you



Protocols & Applications Guide: General Considerations for PCR

BioMath Calculator: Calculate primer T_M in GoTaq® Reaction Buffers

Overview

GoTaq® Flexi DNA Polymerase

GoTaq® DNA Polymerase

GoTaq® Green Master Mix

GoTaq® Colorless Master Mix

GoTaq® PCR Core Systems

Order Product

More Information

GoTaq® DNA Polymerase delivers robust, reliable performance

- **Robust, Reliable Amplification**
- **Choose Enzyme or Master Mixes**
- **Direct-to-Gel Applications**
- **PCR Performance Guarantee**



Overview

GoTaq® Flexi DNA Polymerase

GoTaq® DNA Polymerase

GoTaq® Green Master Mix

GoTaq® Colorless Master Mix

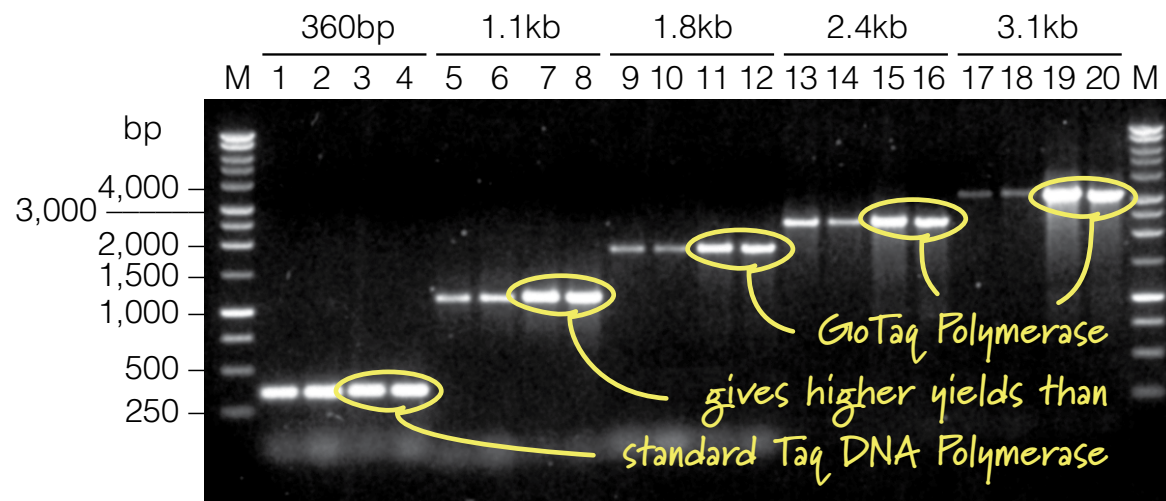
GoTaq® PCR Core Systems

Order Product

More Information

GoTaq® Flexi DNA Polymerase

Robust, reliable amplification with magnesium control.



Magnesium Control:
Fine tune your amplification by optimizing the magnesium requirements of your template

Reactions assembled with either 1.25u of GoTaq® DNA Polymerase or 1.25u of standard Taq DNA Polymerase. All reactions used 1.5mM MgCl₂.

Robust Amplification:
GoTaq® High-Performance Buffers outperform regular Taq enzymes.

Direct-to-Gel Convenience:
Green GoTaq® Flexi Buffer serves as both reaction buffer and gel loading solution.

Direct-to-Measurement Convenience: Go directly from PCR to fluorescent analysis with Colorless Reaction Buffer.

Overview

GoTaq® Flexi DNA Polymerase

GoTaq® DNA Polymerase

GoTaq® Green Master Mix

GoTaq® Colorless Master Mix

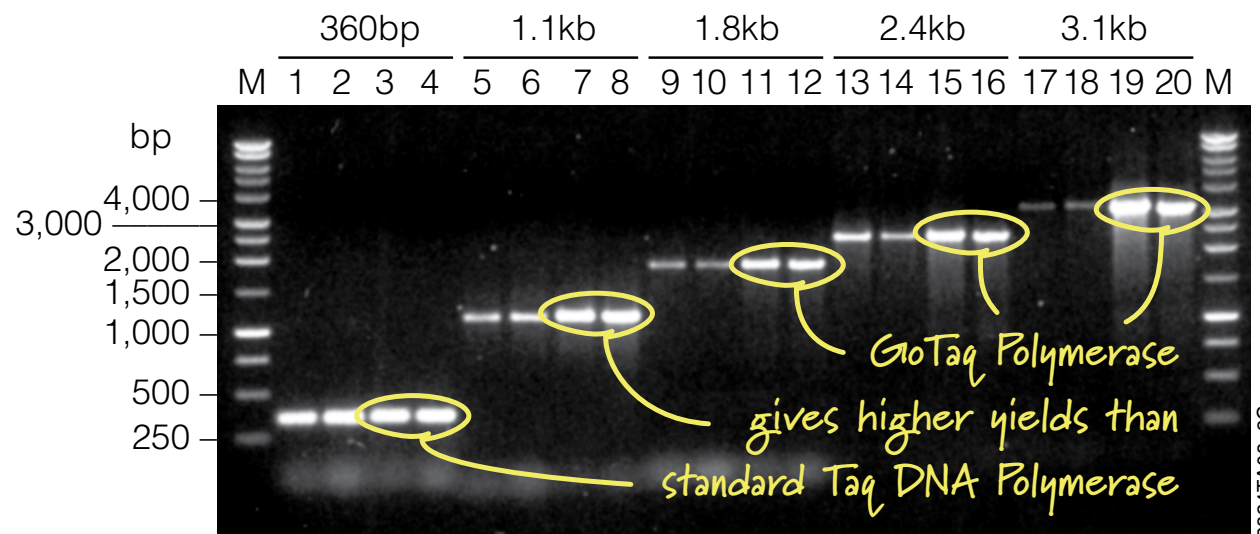
GoTaq® PCR Core Systems

Order Product

More Information

GoTaq® DNA Polymerase

Robust, reliable amplification.



Reactions assembled with either 1.25u of GoTaq® DNA Polymerase or 1.25u of standard Taq DNA Polymerase. All reactions used 1.5mM MgCl₂.

Robust Amplification:

GoTaq® High-Performance Buffers outperform regular Taq enzymes.

Direct-to-Gel Convenience:

Green GoTaq® Flexi Buffer serves as both reaction buffer and gel loading solution.

Direct-to-Measurement

Convenience: Go directly from PCR to fluorescent analysis with Colorless Reaction Buffer.

Overview

GoTaq® Flexi DNA Polymerase

GoTaq® DNA Polymerase

GoTaq® Green Master Mix

GoTaq® Colorless Master Mix

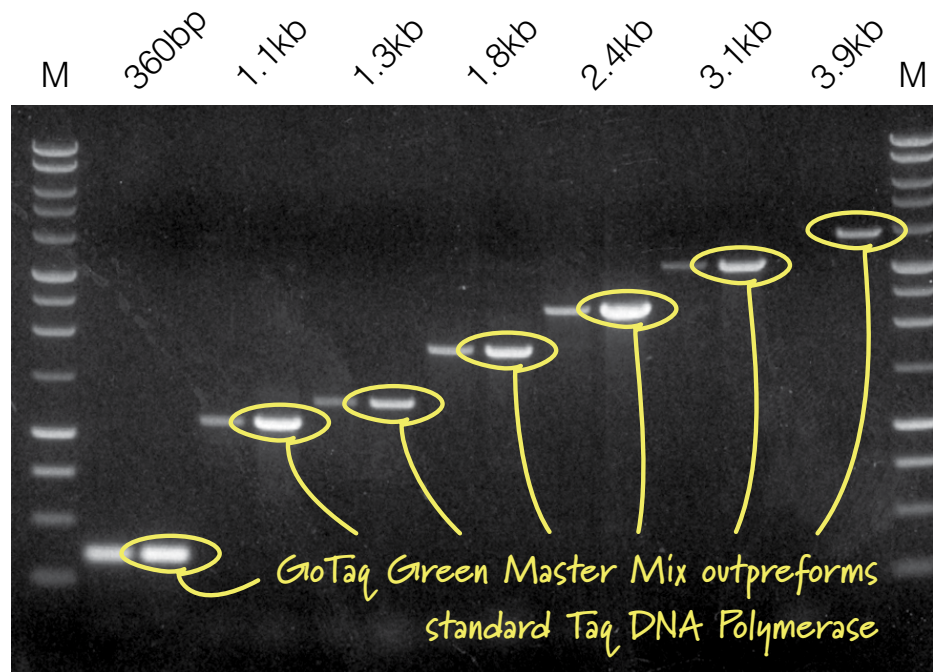
GoTaq® PCR Core Systems

Order Product

More Information

GoTaq® Green Master Mix

**Robust, reliable amplification
with rapid reaction set-up for gel analysis.**



Amplification of targets ranging from 360bp to 3.9kb from Human Genomic DNA or Mouse Genomic DNA using standard conditions for Taq DNA Polymerase and GoTaq® Green Master Mix.

Convenience:

Simply add primers and template.

Robust Amplification:

GoTaq® High-Performance Buffers outperforms regular Taq enzymes.

Direct-to-Gel Convenience:

Green GoTaq® Buffer serves as both reaction buffer and gel loading solution.

Overview

GoTaq® Flexi DNA Polymerase

GoTaq® DNA Polymerase

GoTaq® Green Master Mix

GoTaq® Colorless Master Mix

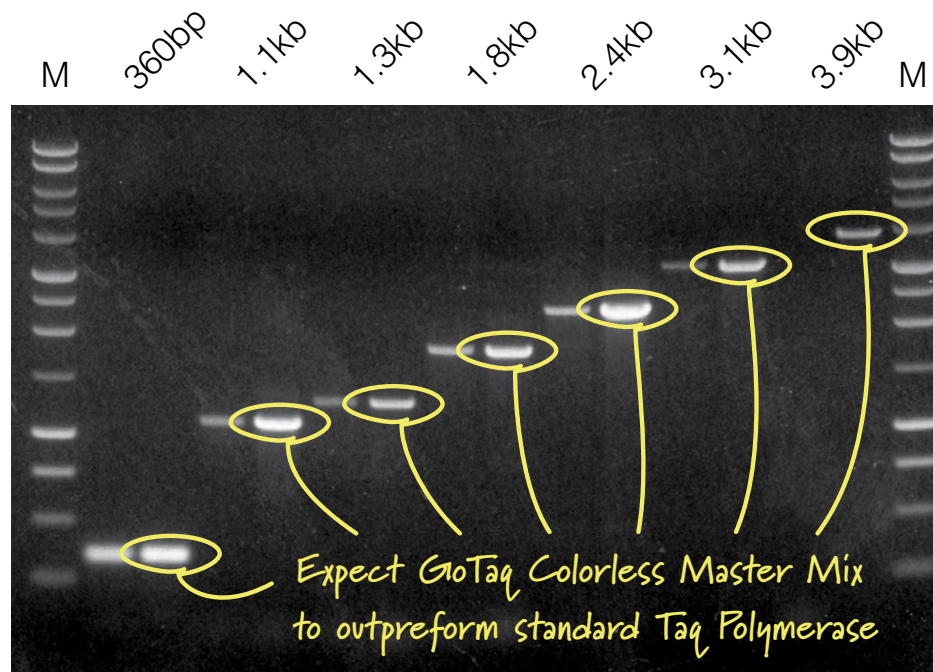
GoTaq® PCR Core Systems

Order Product

More Information

GoTaq® Colorless Master Mix

Robust, reliable amplification with rapid set-up for direct fluorescent measurement.



Amplification of targets ranging from 360bp to 3.9kb from Human Genomic DNA or Mouse Genomic DNA using standard conditions for Taq DNA Polymerase and GoTaq® Colorless Master Mix.

Convenience:

Simply add primers and template.

Robust Amplification:

GoTaq® High-Performance Buffers outperforms regular Taq enzymes.

Direct-to-Measure

Convenience: Go directly from PCR to fluorescent analysis with Colorless Reaction Buffer.

Overview

GoTaq® Flexi DNA Polymerase

GoTaq® DNA Polymerase

GoTaq® Green Master Mix

GoTaq® Colorless Master Mix

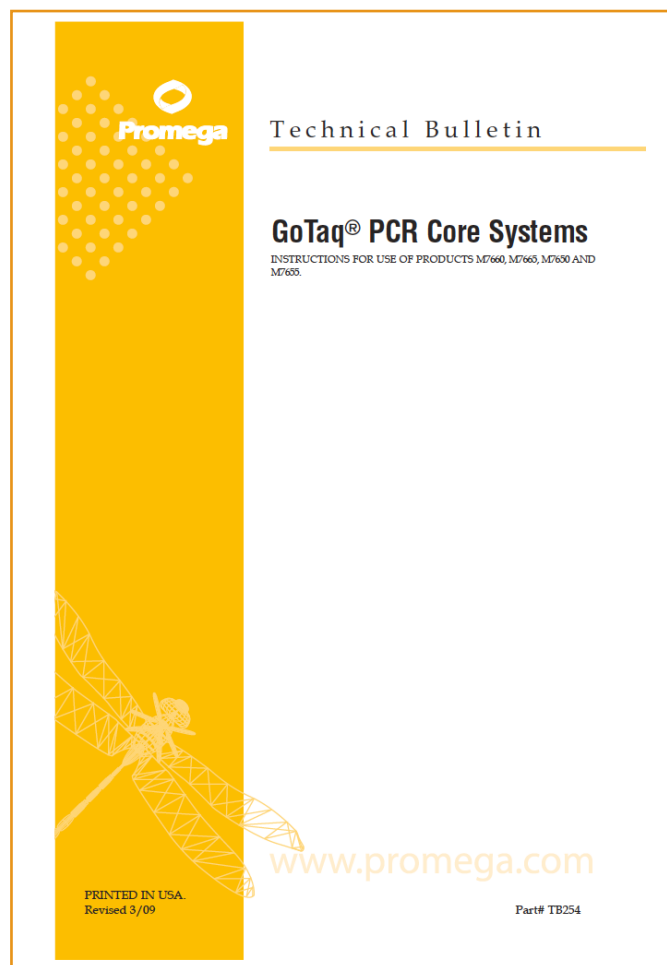
GoTaq® PCR Core Systems

Order Product

More Information

GoTaq® PCR Core System I and II

All of the reagents necessary for optimized amplification.



Direct-to-Gel Convenience:
Green GoTaq® Flexi Buffer serves as both reaction buffer and gel loading solution.

Robust Amplification:
GoTaq® High-Performance Buffers outperforms regular *Taq* enzymes.

Direct-to-Measurement Convenience: Go directly from PCR to fluorescent analysis with Colorless Reaction Buffer.

Magnesium Control:
Fine tune your amplification by optimizing the magnesium requirements of your template.

Complete Kit

Contains the GoTaq® DNA Polymerase, GoTaq® Flexi Buffers (Green and Colorless), Magnesium Chloride and dNTPs.

GoTaq® Core System II also includes positive control primers and template.



Overview

GoTaq® Flexi DNA Polymerase

GoTaq® DNA Polymerase

GoTaq® Green Master Mix

GoTaq® Colorless Master Mix

GoTaq® PCR Core Systems

Order Product

More Information



[Promega Catalog](#)



Ordering Information

Product	Size	Catalog Number
GoTaq® Flexi DNA Polymerase ^(a,b)	100u	M8291
	500u	M8295
	2,500u	M8296
	5,000u	M8297
	10,000u	M8298
GoTaq® DNA Polymerase ^(a,b)	100u	M3001
	500u	M3005
	2,500u	M3008
GoTaq® Green Master Mix ^(a,b)	100 reactions	M7122
	1,000 reactions	M7123
GoTaq® Colorless Master Mix ^(a,b)	100 reactions	M7132
	1,000 reactions	M7133
GoTaq® PCR Core System I ^(a,b)	200 reactions	M7660
GoTaq® PCR Core System II ^(a,b)	200 reactions	M7665

For laboratory use.

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^(b)Use of these products for basic PCR is outside of any valid US patents assigned to Hoffman La-Roche or Applera. These products can be used for basic PCR in research, commercial or diagnostic applications without any license or royalty fees.

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GoTaq® DNA Polymerase

GoTaq® Green Master Mix

GoTaq® Colorless Master Mix

GoTaq® PCR Core Systems

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-  Tritle, D. (2006) Activity of Promega restriction enzymes in GoTaq® Green Master Mix and PCR Master Mix. *eNotes/AP0075*.
-  Knoche, K., *et al.* (2005) GoTaq® Flexi DNA Polymerase: Robust performance with magnesium optimization. *Promega Notes* **89**, 17-20.
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BioMath Calculator: Calculate primer T_M in GoTaq® Reaction Buffers

