

GoTaq[®] DNA Polymerase Family

Go for Performance

Experience improved PCR performance with GoTaq[®] DNA Polymerase products. GoTaq[®] DNA Polymerase is a proprietary formulation of *Taq* DNA polymerase that gives enhanced amplification compared to standard *Taq* DNA polymerase. GoTaq[®] DNA Polymerase comes in a variety of formulations designed to give you maximum flexibility, control and convenience.

Go for High Specificity and Room Temperature Set-Up

GoTaq[®] Hot Start Polymerase contains the high-performance GoTaq[®] DNA Polymerase bound to a proprietary antibody. The antibody blocks polymerase activity, allowing room temperature set-up, reducing primer dimer formation, and providing higher specificity (Figure 1). The polymerase activity is restored during the initial denaturation.

Go for Convenience

GoTaq[®] Master Mixes are pre-mixed, ready-to-use solutions containing GoTaq[®] DNA Polymerase, dNTPs, MgCl₂ and the GoTaq[®] Reaction Buffers (Figure 2). Using these master mixes improves speed and efficiency of reaction set up by providing the enhanced performance of GoTaq[®] DNA Polymerase in a convenient, easy-to-use, timesaving format. The GoTaq[®] Master Mixes are available for both standard and hot-start PCR.

Go for Optimization

In addition to the convenient master mix format, the GoTaq[®] family also offers products that allow optimization of enzyme or Magnesium concentration.

Go Directly to Gel

GoTaq[®] 5X Green and 5X Colorless Reaction Buffers contain a compound that increases sample density, so that samples sink easily into the wells of an agarose gel. The 5X Green buffer contains blue and yellow dyes that migrate at the same rate as 3–5kb DNA fragments (blue) and ahead of primers (yellow) in a 1% agarose gel (Figure 3). The 5X Colorless buffer is perfect for post-amplification analysis by fluorescence or absorbance without prior purification of the DNA.

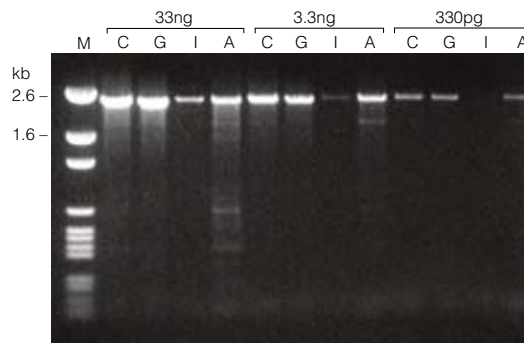


Figure 1. GoTaq[®] Hot Start Polymerase with Colorless Flexi Buffer (C) and with Green Flexi Buffer (G) outperforms antibody (I) or chemically modified (A) competitor hot-start DNA polymerases for amplification of a 2.4kb fragment of the human APC gene.

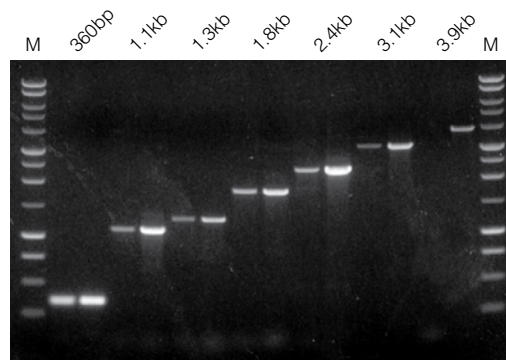


Figure 2. GoTaq[®] Green Master Mix outperforms standard *Taq* DNA Polymerase on a variety of targets. Targets amplified from Human Genomic DNA (Cat.# G3041) or Mouse Genomic DNA (1.1kb target; Cat.#G3091) range in size from 360bp to 3.9kb. Amplifications were performed using standard conditions for *Taq* DNA Polymerase (left lane of each pair) or GoTaq[®] Green Master Mix (right lane of each pair). Lane M; BenchTop 1kb DNA Ladder (Cat.# G7541).

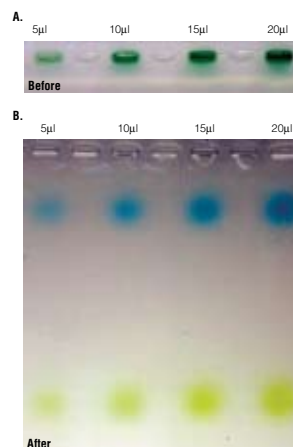


Figure 3. GoTaq[®] DNA Polymerase reactions with 1X Green GoTaq[®] Reaction Buffer before (Panel A) and after (Panel B) electrophoresis show separation of the yellow and blue dyes.



GoTaq® DNA Polymerase Family

GoTaq® DNA Polymerase comes in a variety of formulations designed to give you maximum flexibility, control and convenience. Choose the GoTaq with the features you need:

	Superior Amplification	Higher Specificity	Direct-to-Gel Loading	Master Mix Formulation	dNTPs Included	Colorless Loading Buffer	Green Loading Buffer	Magnesium Supplied Separately	Easy and Convenient Room Temperature Set-up	Controls Supplied Separately
GoTaq® Hot Start Polymerase	✓	✓	✓			✓	✓	✓	✓	
GoTaq® Hot Start Green Master Mix	✓	✓	✓	✓	✓		✓		✓	
GoTaq® Hot Start Colorless Master Mix	✓	✓	✓	✓	✓	✓			✓	
GoTaq® DNA Polymerase	✓		✓			✓	✓			
GoTaq® Flexi DNA Polymerase	✓		✓			✓	✓	✓		
GoTaq® Green Master Mix	✓		✓	✓	✓		✓			
GoTaq® Colorless Master Mix	✓		✓	✓	✓	✓				
GoTaq® PCR Core System I	✓		✓		✓*	✓	✓	✓		
GoTaq® PCR Core System II	✓		✓		✓*	✓	✓	✓		✓

*dNTPs supplied as a separate kit component.

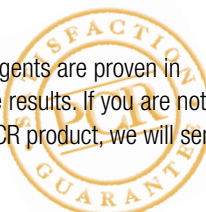
Compatible with Upstream & Downstream Applications

GoTaq products are compatible with the following applications:

- First-strand cDNA synthesis reactions generated using the AMV RT-based Reverse Transcription System (Cat.# A3500) or the ImProm-II™ Reverse Transcription System (Cat.# A3800).
- Subcloning into the pGEM®-T and pGEM®-T Easy Vector Systems (Cat.# A3600, A1360).
- Cell-free expression with the TnT® T7 Quick for PCR DNA in vitro Transcription/Translation System (Cat.# L5540).
- Post amplification clean-up using Wizard® SV Gel and PCR Clean-Up System (Cat.# A9281).
- And much more...

PCR Performance Guarantee

Promega PCR systems, enzymes and reagents are proven in PCR to ensure reliable, high-performance results. If you are not completely satisfied with any Promega PCR product, we will send a replacement or refund your account.



Ordering Information

Product	Size	Cat.#
GoTaq® Hot Start Polymerase	100u	M5001
	500u	M5005
	2,500u	M5006
	10,000u	M5008
GoTaq® Hot Start Green Master Mix	100 reactions	M5122
	1,000 reactions	M5123
GoTaq® Hot Start Colorless Master Mix	100 reactions	M5132
	1,000 reactions	M5133
GoTaq® DNA Polymerase	100u	M3001
	500u	M3005
	2,500u	M3008
GoTaq® Flexi DNA Polymerase	100u	M8291
	500u	M8295
	2,500u	M8296
	5,000u	M8297
	10,000u	M8298
GoTaq® Green Master Mix	100 reactions	M7122
	1,000 reactions	M7123
GoTaq® Colorless Master Mix	100 reactions	M7132
	1,000 reactions	M7133
GoTaq® PCR Core System I	200 reactions	M7660
GoTaq® PCR Core System II	200 reactions	M7665
5X Green GoTaq® Reaction Buffer	20ml	M7911
5X Colorless GoTaq® Reaction Buffer	20ml	M7921
5X Green GoTaq® Flexi Reaction Buffer	20ml	M8911
5X Colorless GoTaq® Flexi Reaction Buffer	20ml	M8901

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