

Balance high yield and fidelity without optimization

AccuPrime[™] *Taq* DNA Polymerase High Fidelity delivers:

- The highest specificity and yield for the most robust PCR amplification
- 9-fold higher fidelity than Taq polymerase alone
- Minimal need for reaction optimization, even with non-optimized primer sets
- Efficient amplification over a broad range of targets (up to 20 kb)

The most robust PCR

Designed for easy, robust amplification of DNA fragments, AccuPrime[™] *Taq* DNA Polymerase High Fidelity provides 9-fold higher fidelity than *Taq* DNA polymerase alone. This optimized enzyme blend has everything you need for high-specificity, high-fidelity PCR including *Taq* DNA polymerase, a proofreading enzyme, Platinum[®] hot-start antibodies, AccuPrime[™] accessory proteins, dNTPs, and magnesium. AccuPrime[™] accessory proteins mean AccuPrime[™] *Taq* DNA Polymerase High Fidelity has improved specificity over Platinum[®] *Taq* DNA Polymerase High Fidelity.

Highest specificity available

Platinum[®] antibodies provide hot-start specificity, but only during the first PCR cycle. Proprietary AccuPrime[™] accessory proteins interact with your template and primers to prevent mispriming throughout all PCR cycles, while not interfering with any downstream applications. Only the specific DNA targets of interest are amplified, yielding results without non-specific bands, even when used with non-optimized primers. Together AccuPrime[™] proteins, Platinum[®] hot-start antibodies, and this unique enzyme blend, make AccuPrime[™] *Taq* DNA Polymerase High Fidelity the most robust PCR enzyme available (figure 1).

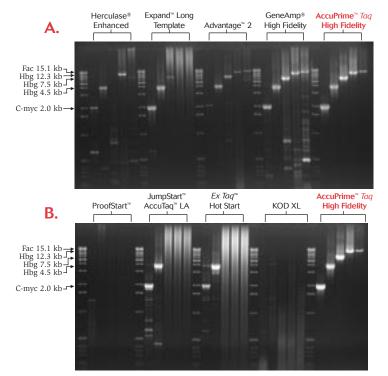


Figure 1 - AccuPrime[™] Tag DNA Polymerase High Fidelity outperforms other enzyme blends

Targets 2 kb through 15.1 kb were generated from 20 ng genomic DNA. Cycling conditions were performed as recommended by each manufacturer. All extensions were 1 minute per kb. 10% of each 50-µl PCR reaction was loaded onto a 1% agarose gel.

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Formulated for fidelity

AccuPrimeTM *Taq* DNA Polymerase High Fidelity combines the proofreading $(3' \rightarrow 5' \text{ exonuclease activity})$ enzyme *Pyrococcus* species *GB–D* and *Taq* DNA polymerase for amplification with 9-fold higher fidelity than *Taq* polymerase alone.

Minimal optimization for a broad range of targets

You will get the highest yield and specificity with the least amount of optimization with the optimized blend of proofreading enzyme and *Taq* polymerase, and AccuPrime[™] proteins contained in AccuPrime[™] *Taq* DNA Polymerase High Fidelity. Even sub-optimally designed primer sets result in a robust amplification, without wasting time with tedious optimization steps. AccuPrime[™] *Taq* DNA Polymerase High Fidelity works well with most templates, from simple to complex, up to 20 kb in length.

Ordering information

Discover the convenience of high fidelity

Order AccuPrime[™] Taq DNA Polymerase High Fidelity and start enjoying easy, accurate PCR results today.

Product	Quantity	Cat. no.
AccuPrime [™] Taq DNA Polymerase High Fidelity	200 rxns	12346-086
	1000 rxns	12346-094
Don't forget:		
Product	Quantity	Cat. no.
10 mM dNTP mix	100 µl	18247-013
	1 ml	18247-088
100 mM dNTP set	4 x 25 μmol	10297-018
	4 x 250 μmol	10297-117
Custom Primers	visit www.invitrogen.com	



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