

Experience the PCR performance of your dreams

DreamTaq DNA Polymerase

Experience the PCR performance no conventional *Taq* enzyme can match with Thermo Scientific™ DreamTaq™ DNA Polymerase. This enhanced *Taq* DNA polymerase is designed to consistently and reliably deliver greater sensitivity, better yields, and longer amplicons. Reach the PCR performance of your dreams with Thermo Scientific™ DreamTaq™ reagents that offer:

- Robust amplification with minimal optimization
- Higher yields, sensitivity, and target length than conventional *Taq* enzymes
- Multiple formats for maximum flexibility and reliability
- Direct gel loading to simplify workflows

Robust amplification across different targets

DreamTaq DNA Polymerase outperforms conventional *Taq* enzymes, providing higher yields and amplifying longer amplicons (Figure 1). With DreamTaq DNA Polymerase, it's possible to achieve robust amplification of targets up to 6 kb from genomic DNA and up to 20 kb from viral DNA.

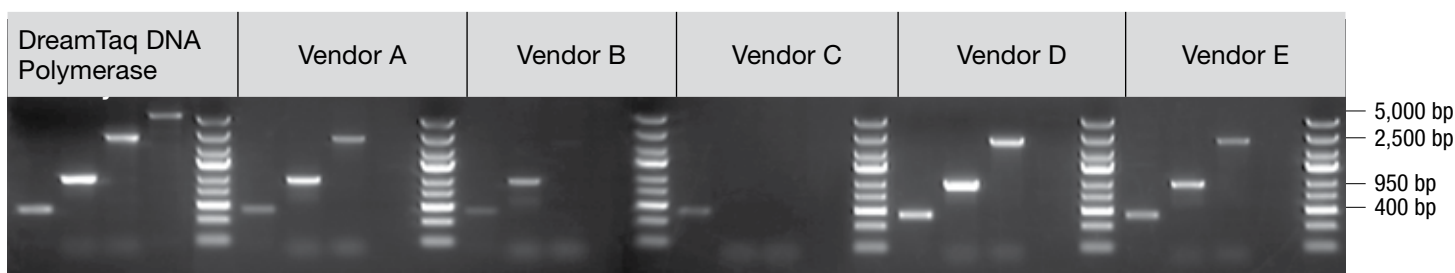


Figure 1. Robust amplification with DreamTaq DNA Polymerase.

DNA fragments of increasing length were amplified with DreamTaq DNA Polymerase and *Taq* DNA polymerase from different vendors according to manufacturers' recommendations. Only DreamTaq DNA Polymerase was able to amplify all fragments with high yields. DNA ladder: Thermo Scientific™ GeneRuler™ Express DNA Ladder.

High sensitivity and yields

DreamTaq DNA Polymerase provides higher PCR sensitivity in comparison to conventional *Taq* enzymes. Robust amplification can be achieved even with low amounts of template DNA (Figure 2).

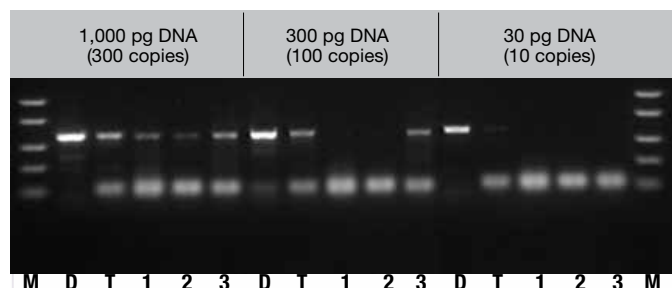


Figure 2. Superior yields with low amounts of DNA template.

A 545 bp fragment from a human gene was amplified with DreamTaq DNA Polymerase and *Taq* DNA polymerases from other vendors. Reactions were performed according to manufacturers' recommendations using decreasing amounts of template DNA.

M: Thermo Scientific™ FastRuler™ Low-Range DNA Ladder

D: DreamTaq DNA Polymerase

T: Thermo Scientific™ *Taq* DNA Polymerase

1–3: *Taq* DNA polymerases from other vendors

Ordering information

Product	Size	Cat. No.
DreamTaq DNA Polymerase	200 U	EP0701
	500 U	EP0702
	5 x 500 U	EP0703
	20 x 500 U	EP0704
	10 x 500 U	EP0705
DreamTaq PCR Master Mix	200 x 50 µL rxns	K1071
	1,000 x 50 µL rxns	K1072
DreamTaq Green DNA Polymerase	200 U	EP0711
	500 U	EP0712
	5 x 500 U	EP0713
	20 x 500 U	EP0714
DreamTaq Green PCR Master Mix	200 x 50 µL rxns	K1081
	1,000 x 50 µL rxns	K1082

Ready-to-load PCR products

DreamTaq DNA Polymerase is provided with both colorless and green reaction buffer. The Thermo Scientific™ DreamTaq™ Green Buffer allows direct loading of PCR products on gels and thus simplifies PCR workflows. The DreamTaq Green Buffer supports the same enhanced enzyme performance as the colorless buffer (Figure 3).

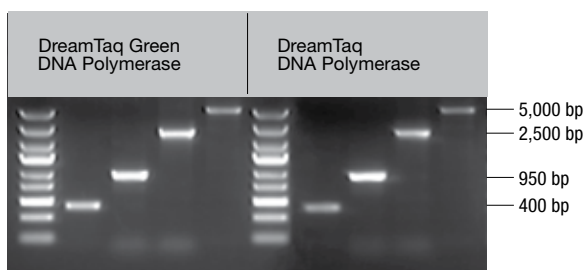


Figure 3. Equal PCR performance with green and colorless reaction buffer. Four DNA fragments were amplified with DreamTaq and Thermo Scientific™ DreamTaq™ Green DNA Polymerase with equal efficiency. DNA ladder: GeneRuler Express DNA Ladder.

What is the DreamTaq Green Buffer?

The 10X DreamTaq Green Buffer includes a density reagent and two tracking dyes. One dye migrates with 3–5 kb DNA fragments and the other dye migrates faster than 10 bp DNA fragments in a 1% agarose gel (Figure 4). The colored buffer is compatible with downstream applications such as DNA sequencing, phosphorylation, ligation, and restriction digestion.



Figure 4. Reaction mixture with DreamTaq Green Buffer (A) prior to electrophoresis, (B) 5 min after electrophoresis, and (C) 15 min after electrophoresis.

Find out more at thermofisher.com/dreamtaq