

# PCRBIO Taq DNA Polymerase



- Robust
- Reliable
- Convenient

## Features

- Increased PCR success rates with amplicons up to 6kb
- Ultra low background DNA
- Advanced buffer chemistry including Mg and dNTPs
- High yields under standard and fast PCR conditions
- Efficient specific amplification from complex templates including GC and AT rich sequences
- Stable at 25°C and 37°C for 4 weeks

## Applications

- Routine application PCR
- TA cloning
- High throughput PCR
- Methylated DNA
- Crude sample PCR
- Standard and fast PCR
- Specific amplification from complex templates (eg GC/AT rich)

## Available formats

- 5u/μl polymerase + 5x reaction buffer
- 2x ready mix
- 2x ready mix containing red dye for direct gel loading

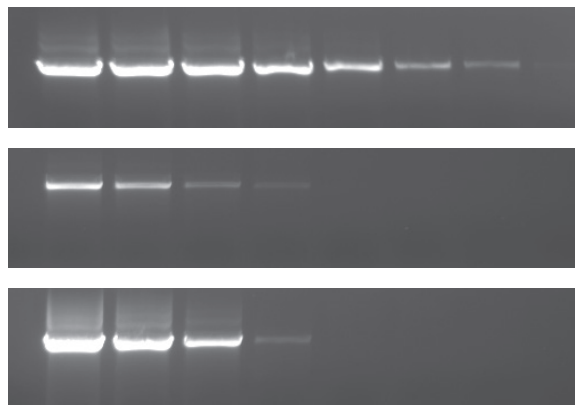


Figure 1.

Shows amplification of a 1.2kb fragment of 60% GC GAPDH, from human genomic DNA, in a 3 fold dilution from left to right. The starting concentration is 200ng of DNA and is diluted to 0.7pg in the 7th dilution. PCRBIO Taq DNA Polymerase (row 1) is able to amplify lower concentration template DNA compared with competitor P and I (rows 2 and 3).

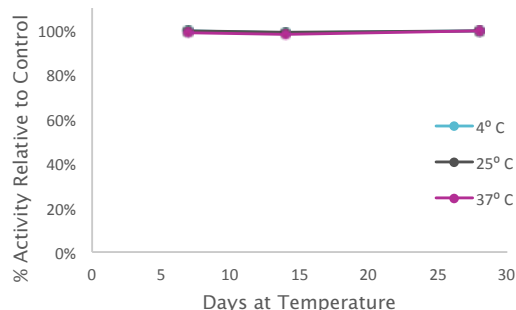


Figure 2.

Shows no change in activity is detected in PCRBIO Taq DNA Polymerase after 28 days at 4°C, 25°C and 37°C.



PCRBIO SYSTEMS  
simplifying research

PCRBIO Taq DNA Polymerase uses the latest developments in polymerase technology and buffer chemistry to enhance PCR speed, yield and specificity. The enzyme and buffer system allow for superior PCR performance on complex templates such as mammalian genomic DNA.

PCRBIO Taq DNA Polymerase is a robust enzyme for all your everyday PCR applications including genotyping, screening and library construction. PCRBIO Taq DNA Polymerase performs consistently well on a broad range of templates including both GC and AT rich.

PCRBIO Taq DNA Polymerase has 5'-3' exonuclease activities, but no 3'-5' exonuclease (proofreading) activity. The enzyme has the same error rate as wild-type taq DNA polymerase, approximately 1 error per  $2.0 \times 10^5$  nucleotides incorporated. PCR products generated are A-tailed and may be cloned into TA cloning vectors. PCRBIO Taq DNA Polymerase provides the research community with an affordable routine application polymerase that performs to the highest possible standard, with a versatility that allows you to amplify with the highest speed, yield, specificity and consistency on the market. PCRBIO Taq DNA Polymerase is room temperature stable for 4 weeks and is produced using an enhanced 12 step purification strategy which includes physical, chemical and enzymatic removal of host DNA.

For added convenience PCRBIO Taq DNA Polymerase is also available as a 2x ready mix. PCRBIO Taq Mix Red contains a red dye suitable for direct loading and tracking during agarose gel electrophoresis.

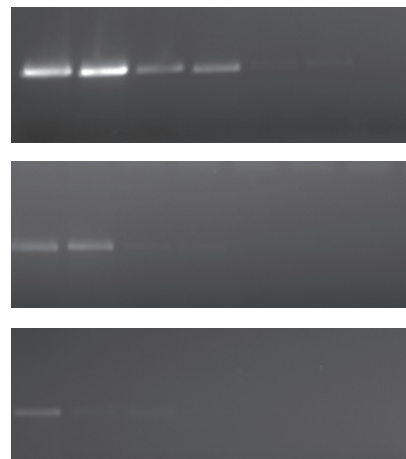


Figure 3.

Shows amplification of the same 1.2kb fragment of 60% GC GAPDH in a 3 fold dilution from left to right as in figure 1. Fast cycling conditions are used of 5 secs denaturation and 30 secs annealing/extension. Under fast conditions PCRBIO Taq DNA Polymerase (row 1) is able to amplify lower concentration template DNA compared with competitor P and I (rows 2 and 3).

Catalogue Number	Product Name	Pack size	Presentation
PB10.11-05	PCRBIO Taq DNA Polymerase	500 Units	[1 x 0.1ml 5 units/μl] & [4 x 1ml buffer]
PB10.11-20		2000 Units	[4 x 0.1ml 5 units/μl] & [16 x 1ml buffer]
PB10.11-40		4000 Units	[8 x 0.1ml 5 units/μl] & [32 x 1ml buffer]
PB10.12-02	PCRBIO Taq Mix	200 Reactions	5 x 1ml
PB10.12-10		1000 Reactions	5 x (5 x 1ml)
PB10.13-02	PCRBIO Taq Mix Red	200 Reactions	5 x 1ml
PB10.13-10		1000 Reactions	5 x (5 x 1ml)