

# PCRBIO Taq Mix Red



- Load directly onto agarose gels
- Fast and standard cycling
- High yield amplification

PCRBIO Taq Mix Red combines the latest developments in polymerase technology and buffer chemistry to enhance PCR speed, yield and specificity in a single PCR-ready mix. This enzyme and buffer system enable superior PCR performance on complex templates. The red mix format allows reduced pipetting and direct gel loading for simple workflows.

## Features

- Red mix for direct gel loading
- 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-rich and AT-rich sequences

## Applications

- Routine application PCR
- TA cloning
- High throughput PCR
- Methylated DNA amplification
- Crude sample PCR
- Standard and fast PCR

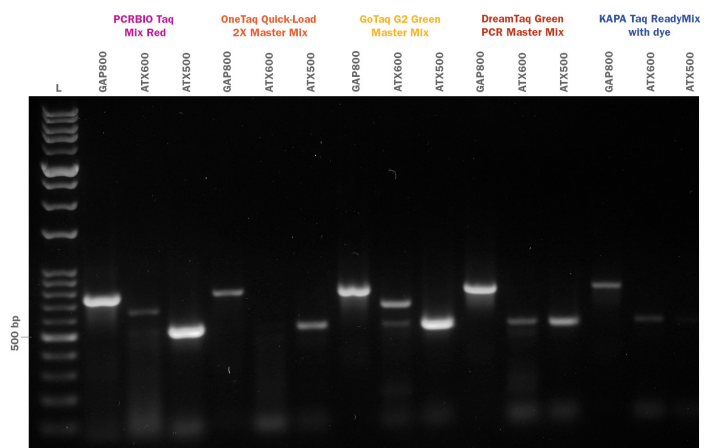


Figure 1. PCRBIO Taq Mix Red outperforms most competitors at amplifying GC-rich fragments

The starting template amount was 5ng mouse genomic DNA. Amplified fragments belong to 3 different genes and have been chosen for their GC content (GAP800 bp with 49% GC, ATX500 bp with 69% GC and ATX600 bp with 71% GC). PCRBIO Taq Mix Red (purple) and matching Taq mixes from competitors were used according to manufacturers' recommendations: NEB (orange), Promega (yellow), Thermo (red) and Kapa Biosystems (blue). Cycling conditions were 95°C 5min, then 40 cycles of 95°C 15sec, 60°C 15sec, 72°C 20sec. 2/5 of the reaction volume was loaded in 1.2% agarose gel. L: PCRBIO Ladder III.

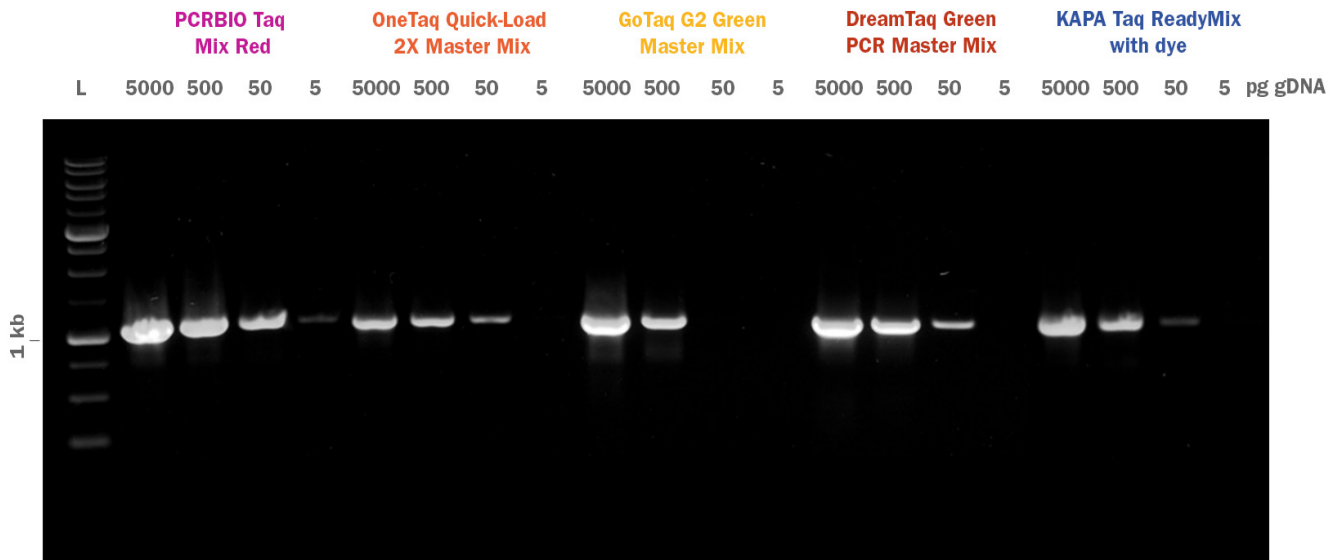


Figure 2. PCRBIOTaq Mix Red outperforms competitors at amplifying a 1kb fragment

PCR amplification of a 1kb fragment of the GAPDH gene using a 1 in 10 serial dilution of mouse genomic DNA (5000, 500, 50 and 5pg), with PCRBIOTaq Mix Red and matching Taq mixes from NEB (orange), Promega (yellow), Thermo (red) and Kapa Biosystems (blue). Reactions were set up using manufacturers' recommendations. Cycling conditions were 95°C 2min, then 40 cycles of 95°C 15sec, 63°C 15sec, 72°C 30sec except for NEB: 94°C 2 min, then 40 cycles of 94°C 15sec, 63°C 15sec, 68°C 30sec. L: PCRBIOLadder II.

PCRBIOTaq Mix Red is powered by PCRBIOTaq DNA Polymerase - a robust enzyme for all your daily PCR applications including genotyping, library construction and screening. PCRBIOTaq Mix Red has the added convenience of a preloaded red dye suitable for direct loading and tracking during agarose gel electrophoresis. This colour mix format ensures reduced pipetting and therefore associated errors, while also speeding up post PCR electrophoresis, since no extra dye is required to run samples on an agarose gel.

PCRBIOTaq DNA Polymerase performs consistently well on a broad range of templates (including both GC and AT-rich targets). The enzyme has 5'-3' exonuclease activities with

the same error rate as wild-type taq DNA polymerase, approximately 1 error per  $2.0 \times 10^5$  nucleotides incorporated. PCRBIOTaq DNA Polymerase production uses an enhanced 12 step purification strategy which includes physical, chemical and enzymatic removal of host DNA. PCR products are A-tailed and may be cloned into TA cloning vectors.

PCRBIOTaq Mix Red provides the research community with a convenient, affordable and versatile master mix for routine application that allows you to amplify with the highest speed, yield, specificity and consistency on the market.

Catalogue Number	Product Name	Pack Size	Presentation
PB10.13-02	PCRBIOTaq Mix Red	200 Reactions	5 x 1mL
PB10.13-02		1000 Reactions	4 x (5 x 1mL)