

# PCRBIO HS Taq Mix Red



- Load directly onto agarose gels
- Superior low copy number detection
- High yields

## Features

- Red mix for direct loading onto agarose gels
- Increased PCR success rates with amplicons up to 6kb
- Ultra low background DNA
- Advanced buffer chemistry including Mg and dNTPs
- Amplifies under standard and fast cycling conditions
- Efficient specific amplification from complex templates including GC rich and AT rich sequences
- Inhibitor tolerant PCR direct from bacterial culture, blood and urine
- Stable at 25°C and 37°C for 4 weeks

## Applications

- Genotyping
- High throughput PCR
- Low copy template detection
- Standard and fast PCR
- Multiplex PCR
- TA cloning
- PCR direct from blood
- Colony PCR
- PCR of methylated DNA for bi-sulphite sequencing
- Routine PCR
- “Difficult” PCR - GC/AT rich DNA

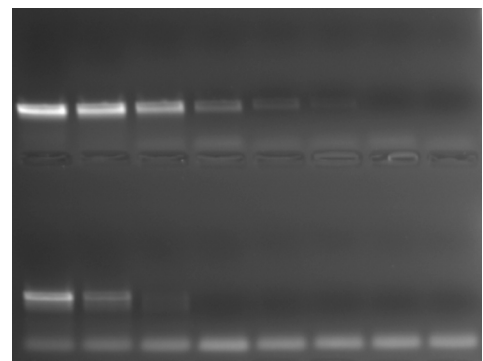


Figure 1.

Shows amplification of a 1kb fragment of Beta-Actin under standard cycling conditions. Primer extension is prevented during reaction set up and first temperature ramp. Primer dimer amplification diverts DNA polymerase activity from the amplicon of interest and reduces sensitivity in the assay. The top row is PCRBIO HS Taq DNA Polymerase and the 2nd row is an equivalent product from Kapa Biosystems.

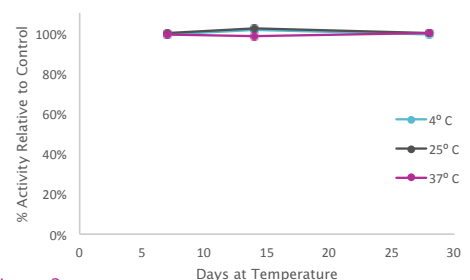


Figure 2.

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



PCR BIO HS Taq Mix Red uses advanced hot start technology for superior sensitivity. Whether you need a hot start assay for high throughput, automated reaction set up or for detection of a low copy number template, PCR Biosystems offers you a robust industry leading enzyme to meet your needs.

PCR BIO HS Taq Mix Red is powered by PCR BIO HS Taq DNA Polymerase to give superior performance on complex templates such as mammalian genomic DNA. PCR BIO HS Taq Mix Red uses the latest developments in polymerase technology and buffer chemistry to enhance PCR speed, yield and specificity with the added convenience of a pre-loaded red dye suitable for direct loading and tracking during agarose gel electrophoresis.

“Hot start” is a term used to describe the inactivation of a DNA polymerase until the initial activation step at 95°C. Inactivation below 65°C prevents primer dimer formation and non-specific amplification allowing for specific amplification from low copy number target sequences. Our proprietary small molecule hot start technology offers improved specificity and sensitivity compared to other methods.

PCR BIO HS Taq Mix Red is room temperature stable for 4 weeks and performs consistently well on a broad range of templates (including both GC and AT rich). PCR BIO HS Taq DNA Polymerase production uses an enhanced 12 step purification strategy which includes physical, chemical and enzymatic removal of host DNA.

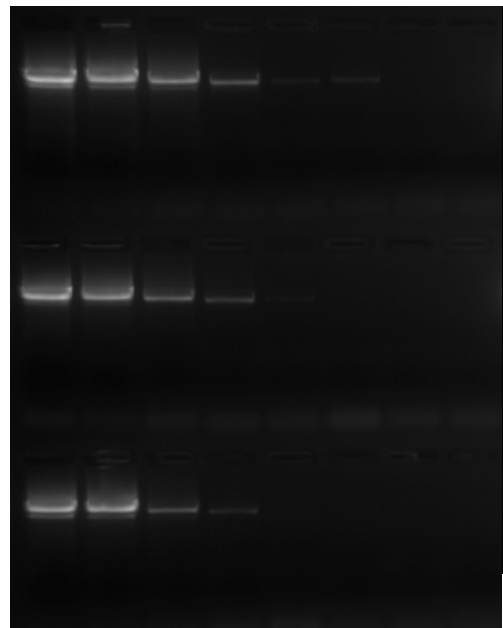


Figure 2.

Shows amplification of a 400bp gene from human genomic DNA under fast cycling conditions. 40 cycles of 5 seconds denaturation at 95 degrees and 5 seconds annealing/extension at 60 degrees. A 10 fold dilution series of template starting from 100ng was used. The top row is PCR BIO HS Taq DNA Polymerase, the 2nd row is the equivalent product from Kapa Biosystems and the 3rd row is the equivalent product from Invitrogen.

Catalogue number	Product name	Pack size	Presentation
PB10.23-02	PCR BIO HS Taq Mix Red	200 x 50µl reactions	5 x 1ml
PB10.23-10		1000 x 50µl reactions	5 x (5 x 1ml)