

PCRBIO Rapid Extract PCR Kit combines rapid DNA extraction with fast, highly specific DNA amplification in a convenient, easy-to-use format. Eliminate the need for laborious and time-consuming DNA extraction methods with this simple, integrated extraction and amplification PCR kit powered by the latest advances in hot start polymerase technology.

Features

- Rapid, convenient, single-tube DNA extraction
- Produces high yield, PCR-ready DNA in 15 minutes
- Minimised contamination risks and sample loss
- Maximised PCR speed, yield and specificity
- Powered by PCRBIO HS Taq Mix Red for direct gel loading
- Ideal for complex templates
- Also available as a lysis-only kit for downstream PCR and qPCR reactions

Applications

- Genotyping
- Transgene detection
- Knockout analysis
- Sequencing

Samples

- Mouse tail clip and ear punch
- Animal tissue
- Hair follicle
- Buccal swab
- Mammalian blood
- FFPE tissue

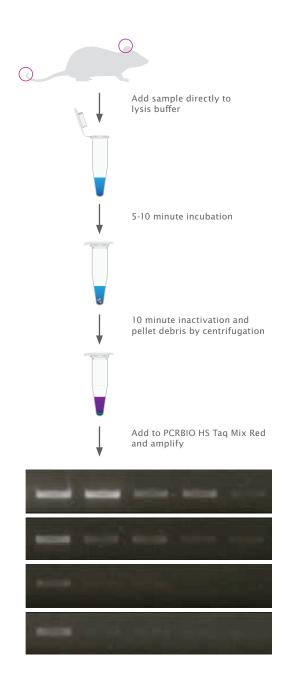


Figure 1. Mouse tail DNA rapid extraction comparison

PCRBIO Rapid Extract PCR Kit was used to extract DNA from 3mg of mouse tail clipping following the standard 15 minute protocol. The extraction was repeated using equivalent extraction kits from alternative manufacturers. A serial three-fold dilution series was made from each supernatant. PCRBIO H5 Taq Mix Red was used to amplify a 1kb fragment of mouse GAPDH gene from each dilution. Results were compared by agarose gel electrophoresis. Row 1 shows results from PCR Biosystems, row 2 from Kapa Biosystems, row 3 from Bioline, row 4 from Sigma and row 5 from Fermentas.







PCRBIO Rapid Extract PCR Kit has been developed for fast, efficient amplification of DNA from a variety of tissues and is particularly suited to solid tissue such as mouse tail or mouse ear. Sample processing is simplified and contamination risks minimised as DNA extraction is performed in a single tube, removing the need for multiple washing steps.

Extracted DNA is amplified in a proprietary buffer system using PCRBIO HS Taq Mix Red. Our antibody-mediated hot start polymerase uses the latest developments in polymerase technology and buffer chemistry to enhance PCR speed, yield and sensitivity. Primer dimer formation and non-specific amplification are prevented giving superior specificity ideal for complex templates such as mammalian genomic DNA. The mix contains a red dye suitable for direct gel loading without the need for additional loading buffer.

PCRBIO Rapid Extract Lysis Kit contains only the lysis and protease buffer system allowing the generation of PCR-ready DNA for use in downstream PCR or qPCR reactions.

Figure 2. Mouse ear DNA rapid extraction and 2.5kb amplification using supplied PCR reagent

PCRBIO Rapid Extract PCR Kit was used to extract DNA from 3mg of mouse ear clipping following the standard 15 minute protocol. The extraction was repeated using equivalent extraction kits from alternative manufacturers. A serial two fold dilution series was made from each supernatant. The supplied polymerase was used to amplify a 2.5kb fragment of the mouse Calnexin gene from each dilution. Results were compared by agarose gel electrophoresis. Row 1 shows results from PCR Biosystems, row 2 from Kapa Biosystems, row 3 from Bioline and row 4 from Sigma.

Catalogue Number	Product Name	Pack Size	Presentation
PB10.24-08	PCRBIO Rapid Extract PCR Kit	80 Reactions	PCRBIO HS Taq Mix Red 2 x 1ml, Buffer A 1 x 1.6ml, Buffer B 1 x 0.8ml
PB10.24-40		400 Reactions	PCRBIO HS Taq Mix Red 10 x 1ml, Buffer A 5 x 1.6ml, Buffer B 5 x 0.8ml
PB15.11-08	PCRBIO Rapid Extract Lysis Kit	80 Reactions	Buffer A 1 x 1.6ml, Buffer B 1 x 0.8ml
PB15.11-24		240 Reactions	Buffer A 3 x 1.6ml, Buffer B 3 x 0.8ml