PCRBIOSYSTEMS
simplifying research

PCRBIO Rapid Extract Lysis Kit

Product description:

PCRBIO Rapid Extract Lysis Kit has been desgined for fast, column-free extraction of PCR-ready DNA from a variety of sample types including animal tissue, hair follicle and mammalian blood. The kit is particularly suited to solid tissue such as mouse tail or mouse ear.

The kit contains a lysis and protease buffer system designed for rapid DNA extraction without the need for laborious and time consuming extraction methods. DNA extraction is performed in a single tube thereby reducing potential contamination and sample loss. Extraction of DNA is rapid, requring only a 15 minute incubation before the DNA is ready for use directly in your PCR. Alternatively, it can be stored at -20˚C for future use.

The DNA generated with PCRBIO Rapid Extract Lysis Kit is suitable for use in all downstream PCR and qPCR applications without further clean-up steps.

Component	80 reactions	240 reactions
5x PCRBIO Rapid Extract Buffer A	1 x 1.6ml	3 x 1.6ml
10x PCRBIO Rapid Extract Buffer B	1 x 800µl	3 x 800µl

Shipping and storage

On arrival the kit should be stored at -20˚C. If stored correctly the kit will retain full activity for 12 months. The kit can go through 30 freeze/thaw cycles with no loss of activity.

Limitations of product use

The product may be used only for in vitro research purposes.

Technical support

For technical support and troubleshooting please email technical@pcrbio.com the following information:

Reaction setup

Screen grabs of qPCR or PCR data.

Sample amounts

Sample	Amount per 100µl extraction	Notes
Mouse tail clip	1 to 2mm (2.5 to 6mg)	
Mouse ear punch	2 to 4mm^2 (2.5 to 6mg)	
Animal tissue	3 to 30mg	
Hair follicle	1-10 individual follicles	
Buccal swab	1 swab	Use 300ul extraction volume for higher yield
Mammalian blood	2 to 8ul Fresh/EDTA blood	2mm^2 FTA, FTA elute or Guthrie cards
FFPE tissue	1mm^3 or 2mm^2 of 10µm section	

Protocol

1. Extraction reaction setup

Prepare the reaction as follows:

Reagent	100µl reaction	Notes
Mouse tail clip	1 to 2mm (2.5 to 6mg)	See table above for other samples
5x PCRBIO Rapid Extract Buffer A (1u/µl)	20µl	Lysis buffer
10x PCRBIO Rapid Extract Buffer B	10µl	Protease containing buffer
PCR grade dH_2O	70µl	

2. Extraction reaction incubation

Incubate extraction reaction for lysis, nuclease and protein denaturation, followed by heat-inactivation:

Cycles	Temperature	Time	Notes
1	75˚C	5min	Vortex twice during incubation
1	95˚C	10min	Deactivates protease

3. Dilute then centrifuge reaction

Add 900µl PCR grade dH_2O to the deactivated reaction. Centrifuge at high speed in a microcentrifuge for 1 minute to pellet debris. The supernatant contains the extracted DNA and may be used directly in PCR or stored at -20˚C indefinitely.

4. PCR reaction setup

Extracted DNA may be used as a template for PCR or qPCR without further clean-up steps. We recommend 1-2µl of extract for a 50µl PCR reaction or 20µl qPCR reaction. The PCRBIO and qPCRBIO range of endpoint and real-time products are recommended for use with this kit.

If contamination from cell extract is a concern, the extracted DNA may be further diluted in water or TE buffer. As DNA concentration and PCR efficiency can vary, users should test a range of dilutions from 10x - 500x to determine the optimal concentration for their PCR.