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PCRBIO Rapid Extract Lysis Kit

Product description

PCRBIO Rapid Extract Lysis Kit has been designed 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, requiring only a 15-minute incubation before the DNA is ready for use directly in your PCR. Alternatively, it can be stored between -30 °C and -15 °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.

Quality control

PCR Biosystems operates under an ISO 13485 certified Quality Management System. Our products are extensively tested and undergo a comprehensive, multi-step quality control process according to ISO 13485 standards, to ensure optimum performance, consistency and traceability.

Component	80 extractions	240 extractions
5x PCRBIO Rapid Extract Buffer A	1 x 1.6 mL	3 x 1.6 mL
10x PCRBIO Rapid Extract Buffer B	1 x 0.8 mL	3 x 0.8 mL

Shipping and storage

On arrival the kit should be stored between -30 °C and -20 °C. If stored correctly, the kit will retain full activity until the indicated expiry date. The kit can be stored at 4 °C for 1 month.

Technical support

Scan or click the QR code for answers to frequently asked technical questions. For further technical support, please email technical@pcrbio.com with the following information:

- Amplicon size
- Reaction setup
- Cycling conditions
- Screen grabs of amplification traces and melting profile

FAQS

Sample amounts

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

For sample types not listed in the table above, please refer to the product FAQ section of our website (QR overleaf) or email technical@pcrbio.com to enquire about suitability of this kit.

Protocol

1. Extraction reaction setup

Create the following 1x extraction buffer:

Reagent	100 µL reaction	Notes
5x PCRBIO Rapid Extract Buffer A	20 µL	Lysis buffer
10x PCRBIO Rapid Extract Buffer B	10 µL	Protease containing buffer
PCR grade dH_2O	70 µL	

Add 100 µL of the 1x extraction buffer prepared above to each sample (300 µL for buccal swabs).

2. Extraction reaction incubation

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

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

3. Dilute then centrifuge reaction

Add 900 µL PCR grade dH_2O to the deactivated reaction. Centrifuge at high speed in a microcentrifuge for 1 minute to pellet debris. Supernatant can be used directly in PCR or stored at -30 °C to -15 °C.

4. PCR Reaction setup

Extracted DNA may be used as a template for PCR or qPCR without further clean-up steps. We recommend 1-2 µL of extract for a 50 µL PCR reaction or 20 µL 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.