



**PCRBIOSYSTEMS**  
simplifying research

## PCR BIO Rapid Extract Lysis Kit

[www.pcrbio.com](http://www.pcrbio.com)

### Product description:

PCR BIO 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 PCR BIO 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 PCR BIO Rapid Extract Buffer A	1 x 1.6ml	3 x 1.6ml
10x PCR BIO Rapid Extract Buffer B	1 x 800µl	3 x 800µl

### Shipping and storage

On arrival the kit should be stored between -30°C and -15°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](mailto: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 <sup>2</sup> (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 <sup>2</sup> FTA, FTA elute or Guthrie cards
FFPE tissue	1mm <sup>3</sup> or 2mm <sup>2</sup> 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 PCR BIO Rapid Extract Buffer A (1u/µl)	20µl	Lysis buffer
10x PCR BIO Rapid Extract Buffer B	10µl	Protease containing buffer
PCR grade dH <sub>2</sub> O	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<sub>2</sub>O 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 between -30°C and -15°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 PCR BIO and qPCR BIO 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.