# Tissue Extract-PCR Buffer Product Handling Guide

Shipping: On Dry or Blue Ice

Catalog number: MDX004

Batch No.: See vial

Concentration: 5x

Store at -20 °C



## Storage and stability:

Tissue Extract-PCR Buffer is shipped on dry or blue ice. On arrival store at -20 °C for optimum stability. Repeated freeze/thaw cycles should be avoided. Thawing during transportation does not affect the product performance. Solutions should be mixed/equilibrated after each thawing to avoid phasing.

#### Expiry:

When stored under the recommended conditions and handled correctly, full activity of the kit is retained until the expiry date on the outer box label.

#### Safety precautions:

Read and understand the SDS (Safety Data Sheets) before handling the reagents. Hardcopies of the SDS will be provided with the first shipment, thereafter they will be available upon request.

#### Quality control

Bioline operates under ISO 13485 Quality Management System. Tissue Extract-PCR Buffer is extensively tested for activity, processivity, efficiency, heat activation sensitivity, absence of nuclease contamination and absence of nucleic acid contamination.

#### Notes:

This reagent has been manufactured under 13485 Quality Management System and is suitable for further manufacturing use as an IVD component.

# **Description**

Tissue Extract-PCR Buffer offers a convenient, fast and efficient method for the extraction of DNA from a variety of mammalian tissues, particularly from rodent tail or ear samples. The DNA extractions are performed in a single-tube, without the need for multiple washing steps, greatly reducing the risk of sample loss and contamination and can be used directly in a PCR reaction.

## Kit components

#### Table 1

Component
Buffer A
Buffer B

## **Users Guidelines**

#### Sample size:

Mouse tail: 1- 2 mm (3 - 6 mg) Mouse ear punch: 2 - 4 mm<sup>2</sup> (3 - 6 mg) Other rodent tissue: 3 - 30 mg

Tissue can be diced or crushed into smaller pieces to expose more surface area to the extraction mix resulting in greater yield of extracted DNA.

## **Extraction**

- 1. Place between 3 mg and 30 mg tissue sample into a clean 1.5 mL microfuge tube and add 20  $\mu$ L buffer A, 10  $\mu$ L buffer B and 70  $\mu$ L of water. Mix well.
- Incubate for 5 minutes at 75 °C\*, vortexing at least twice during the incubation.
- 3. Deactivate by heating to 95 °C for 10 minutes.
- 4. Centrifuge at high speed in a microfuge for one minute to pellet insoluble material and cell debris.
- 5. Transfer supernatant into a clean 1.5 mL microfuge tube.
- 6. Dilute supernatant ten-fold in water.

## Master mix preparation

Recommended reagent volumes per 20  $\mu L$  PCR mix are given in Table 2.

#### Table 2

Diluted supernatant	1 to 2 μL
Primer Mix, 20x	1 μL
Taq DNA Polymerase	1 μL
PCR Buffer, 5x	4 μL
Water (dH <sub>2</sub> O)	As required

## Assay setup

The PCR conditions in Table 3 are suitable for amplicons of up to 1 kb.

Table 3

Step	Temperature	Time	Cycles
Initial denaturation	95 °C	1 min	1
Denaturation	95 °C	15 s	
Annealing	User determined	15 s	25-35
Extension	72 °C	10 s	

Related Products	Cat. No.
Taq HS DNA Polymerase	MDX008-10A
Taq DNA Polymerase	MDX001-10A
Taq PCR Buffer, 5x	MDX002
Taq HS Antibody	MDX014-1

# **Technical Support**

For any technical enquiries, please contact our Technical Support team via email at: <a href="mailto:mbi.tech@meridianlifescience.com">mbi.tech@meridianlifescience.com</a>

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<sup>\*</sup>Extraction incubation time can be extended up to 10 minutes.