

Mouse Tissue Lysis Kit

Introduction

Mouse Tissue Lysis Kit is used for the first step (tissue digestion) in the Direct Mouse Genotyping Kit experiment. The lysis buffer and equilibration buffer can rapidly digest mouse tissues (tail, toes, or ear) to release intact genomic DNA, which can be used directly as a PCR template without the need for extraction from the solution. By using our kit, you can significantly reduce the digestion time.

Components and Storage

Components Size	K1038-200rxns	K1038 - 500rxns	Storage
Balance buffer	20 mL	50 mL	d°C
Lysis buffer	20 mL	50 mL	4°C
Protease K	200 µL	500 μL	-20°C
Shipping: Dry Ice	Shelf life: 2 years		

Protocol

Note: The experimental procedures are derived from Direct Mouse Genotyping Kit (Cat. No. K1025).

Tissue Digestion

- Place mouse tail, toe, or ear tissue (~2 mm) into 75 μL of lysis buffer and 0.75 μL of proteinase K solution for digestion. Incubate at 56°C for 15 minutes. Then, incubate the mixture at 95°C for 10 minutes to 1 hour (undigested tissue will not interfere with PCR).
- **2.** After heating, cool the sample to 4° C and add 75 μ L of equilibration buffer to each sample.
- Use 1 μL of the prepared solution as the template for each 20 μL PCR reaction (you may also adjust the sample volume as needed).

Agarose Gel Electrophoresis

Perform agarose gel electrophoresis on the PCR products to obtain results. Our product Safe DNA Gel Stain (Cat. No. A8743) is available for your choice.

Note

- 1. For each experimental step, ensure that the reagents are thoroughly mixed before use.
- 2. During the digestion step, shaking the tube several times will help release the genomic DNA.
- 3. For most mouse tissue samples, incubation with proteinase K at 56°C for 15 minutes is sufficient to extract genomic DNA. The tissue may still appear intact, but lysis has occurred.
- 4. The obtained genomic DNA can be used for PCR amplification. If not used immediately, the sample can be centrifuged to collect the supernatant and stored at -20°C.

