

10×ACK Lysis Buffer

Cat. No: E-CK-A105

Size: 100 mL/200 mL/500 mL

Cat.	Product	100 mL	200 mL	500 mL	Storage
E-CK-A105	10×ACK Lysis Buffer	100 mL	200 mL	500 mL	2~8 ℃

Storage

Store at 2~8 ℃. Valid for 12 months.

Introduction

Red Blood Cell Lysis Buffer (RBC Lysis), also known as ACK Lysis Buffer, is a kind of solution used to lyse and remove enucleated red blood cells from blood or tissue samples of human or mouse.

This product is sterile. After treating with this buffer, the single cell suspensions can be used for subsequent primary culture, cell fusion, extraction of nucleic acid or protein, and various routine analysis and detection.

Instructions

10×ACK Lysis Buffer is concentrated, dilute with ddH₂O to 1×working solution before use.

For example: take 1 mL 10×ACK Lysis Buffer, add to 9 mL ddH₂O. The mixture is 1×ACK Lysis Working Buffer.

Experimental Procedure

➤ For Mouse Spleen or Rat Spleen

1. Centrifuge single cell suspension of the sample at 300×g for 5 min, discard the supernatant. Since the rat spleen is relatively large, a section approximately the size of a fingernail can be harvested for subsequent processing, and the processing protocol is consistent with that used for mouse spleens.
2. Add 2 mL of 1×ACK Lysis Working Buffer to the sample to resuspend the cells and incubate at RT for 2~3 min (Incubation time should be adjusted accordingly to the actual situation).
3. Add 10 mL PBS to stop the lysis reaction.
4. Centrifuge at 300×g for 5 min and discard the supernatant.
5. Resuspend the cells with PBS or similar physiological buffer for subsequent experiments.

➤ For Human Peripheral Blood Samples

1. Add 100 µL fresh blood into a centrifuge tube, add 2 mL of 1×ACK Lysis Working Buffer and mix thoroughly.
2. Put the centrifuge tube at 4 ℃ for 10 min, until the fresh blood becomes transparent.
3. Centrifuge at 300×g for 5 min and discard the supernatant. Use a pipette to remove the residual supernatant carefully.
4. Add 2 mL PBS to the tube and repeat step 3.
5. Resuspend the cells with PBS or similar physiological buffer for subsequent experiments.

➤ For peripheral blood samples of rats and mouse

1. Add 100 µL fresh blood into a centrifuge tube, add 2 mL of 1×ACK Lysis Working Buffer and mix

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thoroughly.

2. Put the centrifuge tube at 4 °C for 5 min, until the fresh blood becomes transparent.
3. Centrifuge at 300×g for 5 min and discard the supernatant. Use a pipette to remove the residual supernatant carefully.
4. Add 2 mL PBS to the tube and repeat step 3.
5. Resuspend the cells with PBS or similar physiological buffer for subsequent experiments.

Cautions

1. This product is sterile. Please open and use it in laminar flow bench.
2. This reagent is for research use only.
3. For your safety and health, please wear the lab coat and disposable gloves before the experiments.