Red Blood Cell Lysis Buffer

（LY005）

Product Description

This product lyses red blood cells based on the principle that the osmotic pressure difference between the inside and outside of cells causes cell membrane rupture. It is mainly used for the removal of red blood cells in experiments such as the isolation and purification of enzymatically digested and dispersed tissue cells, the isolation and purification of lymphocytes, and the extraction of proteins and nucleic acids from tissue cells.

Components

Product Name	Cat. No.	Volume
Red Blood Cell Lysis Buffer	LY005	100 mL

Storage Conditions

Store at 4℃ and transport at room temperature. The shelf life is one year.

Notes

1. For your safety and health, wear a lab coat and disposable gloves during operation.
2. This product is for scientific research use only and shall not be used for clinical diagnosis, treatment or other clinical applications.

Experimental Procedures

(I) Red Blood Cell Lysis

1. Add 3 volumes of Red Blood Cell Lysis Buffer to 1 volume of fresh whole blood to be lysed (e.g., add 3 mL of Red Blood Cell Lysis Buffer to 1 mL of fresh whole blood), and mix gently by vortexing or inverting the tube.

   Note: For the treatment of fresh tissue cells, digest them into a single-cell suspension with trypsin or other enzymes, collect the cells by centrifugation, and then perform subsequent operations.
2. Incubate on ice for 15 minutes, and mix gently by vortexing twice during the incubation. (After red blood cell lysis, the solution should be clear and transparent.)

(II) Leukocyte Collection

1. Collect leukocytes by centrifugation at 450 ×g for 10 minutes at 4℃, and carefully aspirate and discard the supernatant.
2. Add twice the volume of Red Blood Cell Lysis Buffer to the pellet obtained in the previous step, and resuspend the leukocytes thoroughly by gentle vortexing (e.g., add 2 mL of Red Blood Cell Lysis Buffer if the initial volume of blood is

1 mL).

3. Collect leukocytes by centrifugation at 450 ×g for 10 minutes at 4℃, and carefully aspirate and discard the supernatant.
4. Resuspend the cells for subsequent experiments.

Note: If used for RNA extraction, it is recommended to use RNase-free solutions from this step onwards.