

RBC Lysis Buffer

Product Number: DNK0613

Shipping and Storage

Room temperature (15-30°C)

Components

Component	DNK0613	DNK0613
RBC Lysis Buffer	100ml	500ml

Description

This product utilizes the principle that the difference in salt ion concentration inside and outside the cell can cause cell membrane rupture to lyse red blood cells. It is mainly used for the removal of red blood cells in experiments, such as the separation and purification of lymphocytes, the separation and purification of tissue cells dispersed by enzymatic digestion, and the removal of red blood cells in experiments such as protein and nucleic acid extraction from tissue cells.

Protocol

1. Add 3 volume of the volume of RBC Lysis Buffer to 1 volume of fresh whole blood (such as adding 3 ml of RBC Lysis Buffer to 1 ml of fresh whole blood), gently vortex or invert and mix well.

Note: If fresh tissue cells are processed, they need to be digested with trypsin or other enzymes to form a single cell suspension, collected by centrifugation, and then subjected to subsequent operations.

2. Incubate on ice for 15 minutes, gently swirl and mix twice during this time.

Note: After red blood cell lysis, the solution should be clear and transparent.

3. Collect white blood cells by centrifugation at 450×g for 10 minutes at 4°C, and carefully discard the supernatant.
4. Add twice the volume of RBC Lysis Buffer to the above precipitate, gently vortex to resuspend white blood cells thoroughly (if the initial blood volume is 1 ml, add 2 ml of RBC Lysis Buffer).
5. Collect white blood cells by centrifugation at 450×g for 10 minutes at 4°C, and carefully and thoroughly aspirate the supernatant.
6. Resuspend cells for subsequent experiments.

Note: If extracting RNA, it is best to start using a solution without RNase from this step onwards.