Red Blood Cell (RBC) Lysis Buffer (10x)

A1372415

Storage 2~8℃.

Introduction

Red Blood Cell (RBC) Lysis Buffer (10X) is designed for lysing red blood cells following immunofluorescence staining of human whole blood with fluorescence-conjugated antibodies prior to flow cytometry analysis, during which white blood cells are minimally affected.

Instructions for Use

1. Dilute 1 part of 10× Red Blood Cell Lysis Buffer concentrate with 9 parts of deionized water at room temperature (18~25°C) to prepare a 1× working solution.
2. After incubating according to the conditions specified in the antibody protocol, lyse the red blood cells.
3. Gently mix the whole blood before lysing the red blood cells.
4. Add 2 mL of the working solution per 100 µL of fresh anticoagulated blood. Invert to mix and lyse at room temperature for 5~15 minutes.
5. Centrifuge at 300~400 g for 5 minutes at room temperature. Discard the red supernatant. (If incomplete lysis is observed, repeat step 2. Trace amounts of red blood cells generally do not affect flow cytometry analysis.)
6. Add 2 mL of PBS, invert to mix, and centrifuge at 300~400 g for 5 minutes at room temperature. Discard the supernatant.
7. Resuspend in 200 µL of PBS and proceed to flow cytometry analysis as soon as possible.

Precautions

1. The 1× working solution must be prepared fresh and used immediately.
2. Due to individual variations in blood samples, lysis time may require slight adjustment. If the red blood cell concentration is high, dilute the whole blood with an appropriate amount of PBS.
3. After antibody incubation, red blood cells may settle at the bottom. Failure to resuspend them may result in incomplete lysis.
4. The lysis protocol can be adjusted based on actual conditions, including modifying the volume of working solution or the lysis time.
5. Visually assess the lysis effect. If the sample appears turbid or shows abnormal light scattering on the histogram, incomplete lysis may have occurred.