ReadiUse™ RBC Lysis/Fixation Solution

Catalog number: 37012, 37013
Unit size: 50 mL, 100 mL

Component	Storage	Amount (Cat No. 37012)	Amount (Cat No. 37013)
ReadiUse™ RBC Lysis/Fixation Solution	Refrigerated (2-8 °C), Minimize light exposure	50 mL	100 mL

OVERVIEW

The ReadiUse™ RBC Lysis/Fixation Solution is specifically formulated for efficient red blood cell lysis and concurrent leukocyte fixation in whole blood, making it ideal for intracellular flow cytometry applications. Following cell stimulation, such as with kinase activators like phorbol esters, the solution provides a one-step process that lyses RBCs and fixes leukocytes, effectively inhibiting kinases, phosphatases, and proteases. This preserves the phosphorylation state as it exists in vivo, enabling precise analysis of intracellular signaling events. The ReadiUse™ RBC Lysis/Fixation Solution is optimized to maintain the light-scattering properties of cells, ensuring that cell integrity is preserved during flow cytometric analysis. It is validated for use with both human and mouse whole blood, providing RBC lysis that is as effective as density gradient centrifugation in isolating peripheral blood mononuclear cells (PBMCs) and performing lymphocyte subset analyses. Moreover, the reagent is compatible with phospho-specific antibody staining in conjunction with surface markers (e.g., CD markers). The ReadiUse™ solution is suitable for both lyse/wash and lyse/no-wash immunofluorescent staining protocols, offering flexibility depending on the experimental requirements.

SAMPLE EXPERIMENTAL PROTOCOL

Lysis of whole blood with wash step:

1. Take 100 µl of whole blood and add fluorochrome-conjugated antibody.
2. Incubate for 20 mins at room temperature in a dark place.
3. Add 2 mL of ReadiUse™ RBC Lysis/Fixation Solution, gently mix it.
4. Incubate for 15 mins at room temperature in a dark place.
5. Centrifuge at 350g for 5 mins.
6. Discard the supernatant without disturbing pellet.
7. Add 2 mL staining buffer to the pellet.
8. Centrifuge again at 350g for 5 mins. Discard the supernatant without disturbing pellet.
9. Resuspend cell pellet in 300-500µL of staining buffer.
10. Proceed further with experiment/analysis.

Lysis of whole blood (No wash):

1. Take 50 µl of whole blood and add fluorochrome-conjugated antibody.
2. Incubate for 20 mins at room temperature in a dark place.
3. Add 450 µl of ReadiUse™ RBC Lysis/Fixation Solution, gently mix it.
4. Incubate for 15 mins at room temperature in a dark place.
5. Proceed further with experiment/analysis.

DISCLAIMER

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