SONY

Product Data Sheet

RBC Lysis Buffer (10X)

Catalog # / Size: 2701505 / 100 ml
2701510 / 500 ml

Isotype: Mouse IgG1, κ

Preparation: The pH of the 1X solution should fall within the range of pH 7.1-7.4. Adjust the pH if necessary. Warm the 1X solution to room temperature prior to use.

Formulation: This red blood cell (RBC) lysis buffer is supplied as a 10X solution and should be diluted to 1X in deionized water. 100 ml of 10X concentrate will yield a quantity of 1X solution that is sufficient to lyse 500 samples.

Concentration: NULL

Applications:

Applications: Other

Application Notes:

A. Lysis of Mouse Spleen RBCs:
1. Harvest mouse spleen and prepare a single cell suspension.
2. Pellet the cells by centrifugation (350 x g); aspirate the supernatant.
3. Dilute the 10X Red Blood Cell Lysis Buffer to 1X working concentration with deionized water and resuspend the pellet in 5 ml of 1X Lysis Buffer.
4. Incubate on ice for 4-5 minutes with occasional shaking.
5. Stop the reaction by diluting the Lysis Buffer with 20-30 ml of 1X PBS.
6. Spin the cells (350 x g) and discard the supernatant.
7. Resuspend the pellet in the appropriate buffer (e.g., cell staining buffer Cat. No. 420201), wash 1X.
8. Count cells, adjust density, and proceed with cell staining procedures.

B. Lysis of Human Peripheral Blood RBCs:
1. Dilute the 10X RBC Lysis Buffer to 1X working concentration with deionized water. Warm the 1X solution to room temperature prior to use.
2. Add 2.0 ml of 1X RBC Lysis Buffer to each tube containing up to 100 microL of whole blood.
3. Gently vortex each tube immediately after adding the lysing solution. Incubate at room temperature, protected from light, for 10-15 minutes.
4. Centrifuge 350 x g for 5 minutes. Aspirate supernatant without disturbing pellet.
5. Resuspend the pellet in the appropriate buffer (e.g., cell staining buffer, Cat. No. 420201), wash 1X.
6. Resuspend and proceed with further procedures.

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Application References:

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Description: Red Blood Cell (RBC) Lysis Buffer has been designed, formulated, and tested to ensure optimal lysis of RBCs in single cell suspensions with minimal effects on leukocytes. RBC Lysis Buffer is supplied as a 10X solution containing ammonium chloride, potassium carbonate, and EDTA, and should be diluted in deionized water prior to use. Nucleated RBCs are not effectively lysed with ammonium chloride.

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