RBC Lysis Buffer (1×)

Please read the datasheet carefully prior to use

Cat. No. FB101

Storage: at 2-8°C for one year.

Description

Red Blood Cell (RBC) Lysis Buffer (1×) is designed for the simple and rapid lysis of red blood cells. Due to osmotic stress, it can rapidly rupture non-nucleated red blood cells from blood or tissue samples with minimal effects on lymphocytes or other nucleated cells. This product has been treated with sterile filtration. After processing with RBC Lysis Buffer (1×), the blood or tissue samples can be applied in a variety of routine analysis, tests, primary cell cultures, etc.

Highlights

- Simple operation, resulting in stable lysis results.
- Wide application range.

Product Content

Component	FB101-01
RBC Lysis Buffer (1×)	100 ml

Procedures

Reagents Provided by Users

Product Name	Catalog
PBS (1×)	TransGen, Cat. FG701-01
BSA	Sigma, Cat. A1933

Lysis of Mouse Spleen RBCs

(1) Harvest mouse spleen and prepare a single cell suspension.

(2) Collect cell suspension to a 15 ml centrifuge tube. Centrifuge at 400×g for 3 minutes at 4°C, and discard the supernatant.

(3) Add 1 ml of RBC Lysis Buffer (1×) that has been balanced to room temperature to resuspend the cells. Incubate at room temperature for 3 minutes.

(4) Add 10 ml 1× PBS to stop the reaction. Centrifuge at 400×g for 3 minutes at 4°C, and discard the supernatant.

(5) Resuspend cells with 1 ml 1× PBS (containing 0.5% BSA).

(6) Count cells for use in the following procedures.

Lysis of Mouse Blood RBCs

(1) Collect mouse blood.

(2) Pipette 100 µl of fresh mouse blood and add it to 1 ml of RBC Lysis Buffer (1×) which has been balanced to room temperature. Pipette to mix well. Incubate at room temperature for 5 minutes.

(3) Add 10 ml 1× PBS to stop the reaction. Centrifuge at 400×g for 5 minutes at 4°C, and discard the supernatant.

(4) Resuspend cells with 300 µl 1× PBS (containing 0.5% BSA).

(5) Count cells for use in the following procedures.

Lysis of Human Blood RBCs

(1) Collect human blood.

(2) Pipette 100 µl of fresh human blood and add it to 2 ml of RBC Lysis Buffer (1×) which has been balanced to room temperature. Pipette to mix well. Incubate at room temperature for 10 minutes.

(3) Add 10 ml 1× PBS to stop the reaction. Centrifuge at 400×g for 5 minutes at 4°C, and discard the supernatant.

(4) Resuspend cells with 300 µl 1× PBS (containing 0.5% BSA).

(5) Count cells for use in the following procedures.

Notes

- It is recommended to balance the product to room temperature prior to use.
- If there are still a small number of red precipitates at the bottom of the tube after the lysis of human blood RBCs, it is allowed to add 1 ml of RBC Lysis Buffer (1×) for a second lysis for 3-4 minutes.
- This product can be applied for blood samples treated with multiple anticoagulants. If immune cell counting or clustering is performed by flow cytometry, it is recommended to use blood treated with EDTA or heparin anticoagulant.
- This product cannot be used for the lysis of nucleated RBCs.

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