

Genorise Red Blood Cell Lysis Solution (10x) (RNA)

Genorise Red Blood Cell Lysis Solution (10x) (RNA) is to isolate white blood cells from 1 ml of blood for isolations of RNA, and is for 3000 applications. If a smaller or larger sample volume is employed, the reagent quantity should be proportionally decreased or increased. This kit will guarantee the quality and quantity of white blood cells and is much cheaper than the similar products (\$290/1000 ml).

Materials provided in the kit:

1000 ml Red Blood Cell (RBC) Lysis Solution (10x) (RNA)

Materials required but not provided:

PBS, pH 7.4, prepared in 0.2% DEPC water

Prepare 0.2% DEPC water, stir in the hood overnight, and autoclave at 120°C for 30min.

Protocol

Red Blood Cell Lysis

1. Dilute the Genorise Red Blood Cell Lysis Solution (10x) (RNA) for 10 times. For example, mix 100 ml of the Genorise RBC Lysis Solution (10x) (RNA) with 900 ml of 0.2% DEPC water and use the diluted solution for removal of RBC in the blood.
2. Take 1 ml whole blood to a 15 ml sterile conical tube, and add 3 ml of Red Blood Cell Lysis Solution, vortex for 30 sec.
3. Incubate at room temperature for 10 min to completely disrupt the red blood cells.
4. Centrifuge the tube at 3000 x g for 5 min at 4°C and discard the supernatant.
5. Add 3 ml of cold PBS to the white pellet, suspend the cells by a pipette, and centrifuge the tube at 3000 x g for 5 min at 4°C.
6. If the white pellet contains red substance, add 3 ml RBC Lysis Solution, suspend the cells by a pipette, and incubate at room temperature for 5 min.
7. Centrifuge the tube at 3000 x g for 5 min at 4°C and discard the supernatant.
8. Repeat Step 6 and 7 until the pellet is red-free.

Technical notes:

Process of red blood cell lysis should be quick to avoid RNA degradation.