

## bioGenous™ Red Blood Cell Lysis Solution

**Catalog: E238010**

### Product Description

bioGenous™ Red Blood Cell Lysis Solution is a gentle red blood cell lysis solution designed to lyse nucleated red blood cells based on the principle of osmotic pressure differences between intracellular and extracellular salt ion concentrations. This product is sterilized and is primarily used for the removal of red blood cells in experiments involving the separation and purification of tissue cells dispersed by enzymatic digestion, lymphocyte isolation, and the extraction of proteins and nucleic acids from tissue cells.

### Product Information

Component	Catalog#	Volume	Storage& Stability
bioGenous™ Red Blood Cell Lysis Solution	E238010	100 mL/500 mL	2°C-8°C, 36 months

### Materials & Reagents Required But Not Included

The following extended materials and reagents required for organoid maintenance can be purchased from [www.biogenous.cn](http://www.biogenous.cn).

Manufacturer	Reagents	Catalog#
	1xPBS, PH 7.2-7.4, 0.01M	-
bioGenous™	bioGenous™ Tumor Tissue Digestion Solution	K601003

### Directions for Use

#### Fresh Whole Blood Samples

1. Add 3 volumes of Red Blood Cell Lysis Solution to 1 volume of fresh whole blood. For example, add 3 mL of lysis solution to 1 mL of fresh whole blood, gently vortex or invert to mix.
2. Incubate on ice for 15 min, gently vortexing twice during the incubation. After lysis, the solution should be clear and transparent.
3. Centrifuge at 450 x g for 10 min at 4°C to pellet white blood cells, and carefully aspirate the supernatant.
4. Add 2 volumes of Red Blood Cell Lysis Solution relative to the initial blood volume to the white blood cell pellet, gently vortexing to resuspend. For instance, if the initial blood volume was 1 mL, add 2 mL of lysis solution.
5. Centrifuge at 450 x g for 10 min at 4°C to pellet white blood cells, and carefully aspirate the supernatant.
6. Resuspend cells for subsequent experiments; if extracting RNA, it is best to begin using DEPC-treated water for solution preparation at this step.

## Fresh Tissue Samples

1. Digest fresh tissue using collagenase and protease (or Tumor Tissue Digestion solution (K601003)) to create a tissue-cell suspension. Centrifuge and discard the supernatant. Add 1 mL of Red Blood Cell Lysis Solution to the pellet and gently vortex or invert to mix.
2. Centrifuge at 350 x g for 5 min at 4°C to pellet tissue cells, and carefully aspirate the supernatant.
3. Resuspend cells in PBS or basic culture medium for subsequent experiments.

**Note:** This product is sterilized. Please handle and transfer it under sterile conditions.

## Quality Control

All components are negative for bacterial and fungal contamination. Certificate of authenticity (COAs) for all other products are available upon request.

## Safety information

Read the Safety Data Sheets (SDSs) and follow the manufacture's instruction.

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## Contact and Support

For questions, suggestions, and technical supports, please contact us at E-mail: [info@biogenous.cn](mailto:info@biogenous.cn).

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