101Bio RBC Lysis Buffer

Cat. #: P5W7 (250 ml)

Shipping and Storage: Ship and store at RT.

Shelf Life: 12 months

Product Description:

Red blood cells (RBC) are abundant in blood-rich organs such as spleen of mouse and is the major component of blood. In many experiments such as protein and nucleic acid extraction from blood rich organs and analysis of nucleated cells from blood by flow cytometry, the RBC are not desirable and should be removed as much as possible prior to the extraction procedures. 101Bio RBC Lysis Buffer is a modified ammonium chloride solution that can effectively lyse RBC without significant effect on other nucleated cells.

The RBC lysis buffer is mainly used for lysis of RBC from mouse and human.

This product is for research use only.

Product Contents (store at RT)

Component	Amount
101Bio RBC Lysis Buffer	250 ml

Protocol:

1. Lysis RBC in mouse tissues
   - 1.1. Prepare cell suspension from RBC-rich (blood-rich) organ such as mouse spleen.
   - 1.2. Pellet the cells by low speed centrifugation (400-500x g for 3-4 minutes).
   - 1.3. Pour out the supernatant completely and resuspend the pellet in **4-5 ml RBC Lysis Buffer per gram of tissue**.
   - 1.4. Incubate at RT for 3-5 minutes and pellet the cells by low speed centrifugation (400-500x g for 3-4 minutes).
   - 1.5. Resuspend the pellet in proper buffers (such as 1x PBS, FACS buffer etc.) for downstream experiment. The cells are ready for further analysis.

2. Lysis RBC in mouse or human blood samples
   - 2.1. Add **10 volume RBC Lysis Buffer to 1 volume blood**. Cap the tube, invert a few times and incubate at RT for 4-5 minutes with occasional shaking.
   - 2.2. Spin the tube at 400-500x g for 5 minutes.
   - 2.3. Pour out the supernatant immediately and resuspend the pellet in 10-20 ml 1x PBS or other buffers such as FACS buffer for downstream assay. If significant number of RBC remains, a second round of lysis can be performed.

     The cells are ready for further analysis.

Related products

Cat.#	Kit Name	Application	Protein Status	Minute
P501	Total protein kit	cells → total protein	denatured / native	1 ~ 8
P502	Total protein kit	tissues → total protein	denatured / native	1 ~ 8
P503	Membrane protein kit	cells / tissues → membrane protein	native , detergent-free	20 ~ 45
P504	Nuclear protein kit	cells / tissues → nuclear & cytosol protein	native	6 ~ 8
P505	Detergent-free kit	cells → total protein	denatured / native	5 ~ 8
P506	Detergent-free kit	Tissues → total protein	denatured / native	5 ~ 8
P507	Mitochondria kit	cells / tissues → mitochondria	native, detergent-free	25 ~ 30
P508	Plant total protein	plant tissues → total protein	denatured/native	5 ~ 8
P510	Plant detergent-free	plant tissues → total protein	native	6 ~ 8
P511	Plant chloroplast kit	plant tissues → intact chloroplast		5
P518	Plant Microsomal Membrane	plant tissues → microsomal membrane	native	1 hr
P512	Bacteria total protein	bacteria → total protein	denatured	2 ~ 3
P513	Nuclear envelope kit	cells → nuclear envelope	native	< 45
P514	Histone/DNA binding protein	cells → histone & dna binding protein	denatured	< 10
P515	Thick cell wall microbes	microbes → total protein	denatured / native	< 10
P516	Detergent-free thick cell wall	microbes → total protein	denatured / native	10
P517	Yeast Mitochondria	yeast → mitochondria	native	60
P518	Plant Microsomal Membrane	plant → microsomal membrane	native	60
P519	Gel slice recovery kit	PAGE gel → protein	denatured / native	10 ~ 20
P521	Hair & nail protein kit	hair, nail → protein	denatured	5 min. hands on
P522	Adipose protein kit	adipose → total protein	denatured / native	20
P523	Adipose fractionation	adipose → water soluble/insoluble protein	native	40
P524	Nuclei isolation kit	cells / tissues → intact nuclei	native, detergent-free	20
P525	FFPE protein kit	FFPE tissues → protein	denatured	60
P528	Endosome isolation kit	cells / tissues → endosome	denatured	20 min. hands on
P529	Adipose nuclei isolation kit	adipose tissues → nuclei & cytosol	native	30

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