

## 5 × SDS Loading Buffer

**Catalog No:** E-BC-R288

**Sizes:** 2 mL/ 5 mL/ 10 mL

Cat	Products	2 mL	5 mL	10 mL	Storage
E-BC-R288	5 × SDS Loading Buffer	1 mL × 2	1 mL × 5	1 mL × 10	-20°C
<b>Manual</b>			<b>1 copy</b>		

This manual must be read attentively and completely before using this product.

If you have any problems, please contact our Technical Service Center for help.

Phone: 240-252-7368(USA) 240-252-7376(USA)

Email: [techsupport@elabscience.com](mailto:techsupport@elabscience.com)

Website: [www.elabscience.com](http://www.elabscience.com)

Please kindly provide us the lot number (on the outside of the box) of the kit for more efficient service.

## Introduction

This product is a loading buffer for protein samples with SDS-PAGE electrophoresis. The SDS contained in the product can be combined with the protein to form a SDS-protein complex, which bring a large amount of negative charge to the protein; SDS can break intramolecular and intermolecular hydrogen bonds, and destroy the secondary and the tertiary structure of protein. The DTT contained in the preparation can break the disulfide bond between the cysteine residues, destroy the structure between the proteins, and eliminate the difference between the protein structures. Ultimately, the rate of protein migration in the SDS-PAGE is only related to its molecular weight. Bromophenol blue is used as an indicator for electrophoresis to determine the progress of electrophoresis.

## Instructions

1. Dissolve 5 × SDS Loading Buffer at room temperature or with water bath.
2. For each 20 μL protein samples, add 5 μL 5 × SDS Loading Buffer and mix them well.
3. Heat at 95~100°C for 10 min to fully denatured the proteins.
4. Centrifuge at 12,000 rpm for 2 min, and collect the supernatant.
5. Take 10~20 μL supernatant and add it into the SDS-PAGE gel well.

## 5 × SDS Loading Buffer Components

0.25 M Tris•HCl (pH6.8), 0.5 M DTT, 10% SDS, 0.5% BPB, 50% Glycerin.

## Storage

Store at -20°C for 12 months.

## Cautions

1. When the product is stored at -20°C, SDS precipitation may occur. Please dissolve it in warm water before use. Please store them properly according to its usage.
2. If there is still a relatively viscous or viscous translucent object after sample boiling, please extend the boiling time or add 1 × SDS loading buffer and boil the sample again, so that the genomic DNA bound to the protein can be partially broken to reduce the generation of sample viscosity.
3. This product contains DTT, which is slightly irritating and has certain toxicity.