

## 5× SDS Loading Buffer

Cat. No.: E-BC-R288

Size: 5 mL/ 10 mL

Cat	Product	5 mL	10 mL	Storage
E-BC-R288	5× SDS Loading Buffer	1 mL × 5	1 mL × 10	-20°C

### Introduction

This product is a protein loading buffer for 5× SDS Loading Buffer electrophoresis.

The main components include SDS, bromophenol blue, reducing agent, etc. Mixed in proportion with proteins at heating can make proteins carry a large number of negative charges and eliminate their own charge differences; at the same time, the hydrogen bonds and disulfide bonds within and between molecules of proteins are disconnected, and the secondary and tertiary structures are destroyed, thereby controlling the migration rate of proteins only related to their molecular weight.

This product adopts improved reductant to replace DTT with irritating odor and toxicity, which is mild and safe with better performance.

### Instructions

1. Melt 5× SDS Loading Buffer at room temperature.
2. Add 5 µL 5× SDS Loading Buffer per 20 µL protein sample and mix fully.
3. Heat in a water bath at 95-100°C for 5-10 min to fully denature the protein.
4. After cooling to room temperature, take 10-20 µL and add samples into the well of SDS-PAGE gel..
5. Usually electrophoresis can be stopped until the blue dye reaches the bottom end of the gel.

### Storage

Store at -20°C for 12 months; Store at 2-8°C for 6 months.

### Cautions

1. When this product is stored at -20°C, precipitation may occur and must be completely melted before use. If insoluble substances such as precipitate are found, they can be heated in a 50°C water bath for about 5-15 minutes until completely melted. Store the product in separate containers according to usage and not to perform repeated freeze-thaw treatment.
2. If the temperature is too high (e.g., more than 100°C) or too long (e.g., more than 15 min) when the mixed sample is heated in a water bath, it may cause protein degradation or abnormal color of the indicator in the loading buffer.
3. When using this product, it may become viscous, adhere to the walls, and not easily adsorb, which are all normal phenomena.
4. This product is suitable for denatured polyacrylamide gel electrophoresis.
5. This product is for professional scientific research only.
6. For your safety and health, please wear a lab coat and disposable gloves.

### For Research Use Only