# 5× SDS Loading Buffer

**Cat. No: E-BC-R288** **Size: 2 mL/ 5 mL/ 10 mL**

## Product Content

| 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℃ |

## 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 this product can break the disufide 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. Add 5 μL 5×SDS Loading Buffer per 20 μL protein sample and mix fully.
3. Heat at 95~100℃ 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 into the well of SDS-PAGE gel.

## 5 × SDS Loading Buffer Components

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

## Storage

Store at -20℃ for 12 months.

## Cautions

1. SDS precipitation may occur when this product is stored at -20℃. If precipitation occurs, dissolve in warm water before use. Please store in appropriate packaging according to the usage.
2. If there is still a viscous translucent substance after the sample is boiled, please extend the boiling time or add 1 ×SDS loading buffer and boil the sample again to fully release the proteins bound to the genomic DNA and partially break the genomic DNA, so as to reduce the viscosity of the sample
3. This product contains DTT, please take safety precautions and follow the procedures of laboratory reagent operation.