

SDS-PAGE Loading Buffer (5X)

Cat#: orb90545 (User Manual)

Overview

Product Name	SDS-PAGE Protein Loading Buffer 5X (Reducing)
SKU/Catalog Number	orb90545
Form	Liquid
Size	3mL
Contents	10% SDS, 500mM DTT, 50% Glycerol, 250mM Tris-HCL and 0.5% bromophenol blue dye, PH6.8.
Description	Biorbyt's SDS PAGE Sample Buffer 5X (Reducing) is the most commonly used sample buffer for Sodium Dodecyl Sulfate - Polyacrylamide Gel Electrophoresis (SDS-PAGE) of denatured proteins in the Laemmli SDS-PAGE system.
Equivalent	GeneCopoeia (Product No. P013)
Cite This Product	SDS-PAGE Protein Loading Buffer 5X (Reducing)
Storage	Upon receipt store at -20°C. RIPA Lysis Buffer is stable for one year. Product is shipped on ice.

Assay Principle

Using bromophenol blue dye, SDS-PAGE Protein Loading Buffer is a ready-to-use 5X solution. It contains 10% SDS, 500mM DTT, 50% Glycerol, 500mM Tris-HCL and 0.05% bromophenol blue dye. It can be used for SDS-PAGE protein loading of conventional proteins. It is especially formulated for protein sample preparation to be used in the Laemmli SDS-PAGE system. It is sufficient to prepare 15 mL protein samples. And the whole sample preparation process can be finished within 5 minutes.

Assay Protocol

1. Equilibrate SDS-PAGE Protein Loading Buffer 5X to room temperature or thaw Loading Buffer in a water bath no higher than 30°C.
2. Mix one volume of SDS-PAGE Protein Loading Buffer 5X with four volume of protein sample (i.e. add 4mL protein sample into 1 mL Loading Buffer).
3. Boil sample for 3-5 min.

Note:

If semitransparent viscous substance remains after boiling, boil sample for another 5-10 min or add 1X SDS-PAGE Protein Loading Buffer which is diluted from 5X SDS-PAGE Protein Loading Buffer to the sample and then boil for another 3-5 min.

4. Allow sample to cool to room temperature.
5. Load sample into the wells of the SDS-PAGE gel and begin electrophoresis.
6. Stop electrophoresis when bromophenol blue dye front reaches to the bottom of the gel.

General Notes

1. SDS-PAGE Protein Loading Buffer 5X contains DTT which has a slightly irritating odor.
2. SDS-PAGE Protein Loading Buffer 5X should be completely dissolved before use.
3. Please wear the lab coat and disposable gloves and operate in a laboratory hood.