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Product Information

Molecular Weight Marker
(M.W. 14,000–66,000)

Catalog Number **SDS7**
Storage Temperature 2–8 °C

Product Description

Polyacrylamide gel electrophoresis (PAGE) in the presence of the anionic detergent, sodium dodecyl sulfate (SDS), has proven to be a useful tool for the separation of protein subunits and the determination of their molecular masses. The proteins supplied in this mixture provide a molecular mass range common to most proteins and their subunits.

This marker is a lyophilized mixture of seven proteins (see Table 1). The mixture has been formulated to yield well-defined bands, which after SDS-PAGE and staining with Brilliant Blue R (Catalog Number B8647) are approximately equal in color intensity.

Table 1.
Protein Mixture in SDS7

Protein	Approximate Molecular Mass (Da)
Albumin, bovine	66,000
Albumin, egg	45,000
Glyceraldehyde-3-phosphate Dehydrogenase, rabbit muscle	36,000
Carbonic Anhydrase, bovine	29,000
Trypsinogen, bovine pancreas	24,000
Trypsin Inhibitor, soybean	20,000
α-Lactalbumin, bovine milk	14,200

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

Instructions for SDS Laemmli PAGE System only

1× Sample Buffer (62.5 mM Tris-HCl, pH 6.8, containing 2% SDS, 5% 2-mercaptoethanol, 10% glycerol, and 0.002% bromophenol blue) – Prepared by mixing Laemmli Sample Buffer, 2× concentrate (Catalog Number S3401) with an equal volume of water.

Molecular Weight Marker – Add 1.5 ml of 1× Sample Buffer to the vial. Mix by inversion and then vortex for 5 seconds to complete solubilization. Aliquot and freeze at –20 °C or below.

Storage/Stability

Store the lyophilized product at 2–8 °C. Store the reconstituted Molecular Weight Marker in aliquots at –20 °C or below.

Procedure

1. Incubate a thawed aliquot of the reconstituted Molecular Weight Marker in a boiling water bath for 60 seconds immediately before application of the marker to the gel.

2. Recommended sample volumes:

   Standard size gel (16 × 14 cm) – 10 µl/well
   Mini-gel (10 × 10 cm) – 5 µl/well

Reference

Laemmli, U.K., Nature, **227,** 680 (1970).

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