

Product Information

Prestained Molecular Weight Marker (M.W. 26,600–180,000)

Catalog Number **SDS7B2**
Storage Temperature 2–8 °C

TECHNICAL BULLETIN

Product Description

The Prestained Molecular Weight Marker consists of 7 standard proteins conjugated to a blue dye (see Table 1). After electrophoresis this prestained marker can be transferred from SDS-PAGE gels to solid phase supports such as nitrocellulose, nylon, or polyvinylidene difluoride (PVDF), thus providing a visual check of transfer efficiency. In addition, it is possible to visually monitor the migration of proteins while electrophoresis is in progress.

Table 1.
Protein Mixture of SDS7B2

Prestained Protein	Native* Subunit Molecular Mass (Da)
α_2 -Macroglobulin from equine serum	180,000
β -Galactosidase from <i>E. coli</i>	116,000
Lactoferrin from human milk	90,000
Pyruvate Kinase from rabbit muscle	58,000
Fumarase from porcine heart	48,500
Lactic Dehydrogenase from rabbit muscle	36,500
Triosephosphate Isomerase from rabbit muscle	26,600

* The electrophoretic mobilities of the prestained marker proteins, compared to the native proteins, are altered by the attachment of dye. Lot-specific apparent molecular masses of the prestained markers are printed on the Certificate of Analysis. The prestained markers are used for a general approximation of molecular masses. For precise molecular mass determinations on Western blots, the Biotinylated Molecular Weight Marker (Catalog Number B2787) is recommended.

One vial is sufficient for
80 applications on a standard gel (16 × 14 cm)
160 applications on a mini-gel (10 × 10 cm)

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

Laemmli Sample Buffer, 2× concentrate (125 mM Tris-HCl, pH 6.8, containing 4% SDS, 10% 2-mercaptoethanol, 20% glycerol, and 0.004% bromophenol blue) – (Catalog Number S3401)

8 M Urea Solution – Dissolve 24.0 g of urea (Catalog Number U6504) in 25 ml of water. Warming to 37 °C may be required to completely dissolve the material. Bring final volume to 50 ml with water and filter through filter paper.

Prestained Molecular Weight Marker – Dissolve the contents of the vial in 0.5 ml of 8 M Urea Solution. Then add 0.5 ml of Laemmli Sample Buffer, 2× concentrate (Catalog Number S3401). Vortex until homogeneous. Aliquot and freeze at –20 °C.

Storage/Stability

Store the product at 2–8 °C. After reconstitution, store the marker in aliquots at –20 °C.

Procedure

1. Incubate an aliquot in a boiling water bath for 1–2 minutes immediately before application of the marker to the gel.
2. Recommended sample volumes
standard size gel (16 × 14 cm) – 10 μ l/well
mini-gel (10 × 10 cm) – 5 μ l/well

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