Protein Marker, **Broad Range**, (2-212 kDa)







P7702S

150 mini-gel lanes

Lot: 0471210

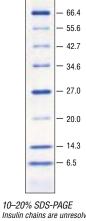
1.125 ml Store at -20°C Exp: 10/13

Description: Protein Marker, Broad Range is a mixture of purified proteins with known amino acid sequences. They are resolved to 13 sharp bands when analyzed by SDS-PAGE (Tris-Glycine) and stained with Coomassie Blue R-250 (1). Two bands (BSA, MW 66.4 kDa and Triosephosphate isomerase, MW 27.0 kDa) are at double intensity to serve as reference points.

Contents: 0.1-0.2 mg/ml of each protein in 70 mM Tris-HCI (pH 6.8 @ 25°C), 33 mM NaCl, 1 mM Na EDTA, 2% (w/v) SDS, 40 mM DTT, 0.01% (w/v) bromophenol blue and 10% glycerol.

Suggested Protocol for Loading a Sample (2):

- 1. Mix Protein Marker, Bring the desired amount of the Protein Marker (7 µl for mini-gels and 15 µl for full length gels) over to a separate tube.
- 2. Heat the Marker to 95-100°C for 3-5 minutes.
- 3. After a quick microcentrifuge spin, load directly on to a gel. To ensure uniform mobility, load an equal volume of 1X Reducing SDS Loading Buffer into any unused wells.



kDa

212

- 158

- 116

— 97.2

Insulin chains are unresolved by SDS-PAGE (Tris-Glycine).

kDa

References:

- 1. Laemmli, U.K. (1970) Nature 227, 680.
- 2. Sambrook, J., Fritsch, E.F. and Maniatis, T. (1989) Molecular Cloning: A Laboratory Manual. (2nd ed.). Cold Spring Harbor: Cold Spring Harbor Laboratory Press.

Protein Marker, Broad Range

PROTEIN	SOURCE	SWISS-PROT Accession #	CALCULATED MW (Da)
Myosin	rabbit muscle		212,000
MBP-β-galactosidase ¹	E. coli		158,194
β-Galactosidase	E. coli	P00722	116,351
Phosphorylase b	rabbit muscle	P00489	97,184
Serum albumin	bovine	P02769	66,409
Glutamic dehydrogenase	bovine liver	P00366	55,561
MBP2*1	E. coli		42,710
Thioredoxin reductase	E. coli		34,622
Triosephosphate isomerase	E. coli		26,972
Trypsin inhibitor ²	soybean	P01071	(20,040-20,167)
Lysozyme	chicken egg white	P00698	14,313
Aprotinin ³	bovine lung	P00974	6,517
Insulin A ⁴	bovine pancreas	P01317	3,400
B chain⁴	bovine pancreas	P01317	2,340

- ¹ MBP2*= maltose-binding protein. MBP-β-galactosidase = fusion of MBP and β-galactosidase. MW determined at NEB.
- ² Trypsin inhibitor (soybean) is a mixture of three isoforms: A-20,094 Da; B-20,040 Da; C-20,167 Da.

These isoforms migrate as one unresolved band using Tris-Glycine gels and as a doublet using Tris-Tricine gel

[Schagger, H. and Von Jagow, G. (1987) Anal. Biochem. 166, 368-379].

- ³ Protein sequence from bovine pancreatic trypsin inhibitor.
- ⁴ Insulin chains are unresolved by SDS-PAGE (Tris-Glycine).

CERTIFICATE OF ANALYSIS

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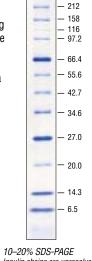
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