Prestained Protein Marker, Broad Range (7–175 kDa)

NEW ENGLAND BioLabs Inc.
1-800-632-7799
info@neb.com
www.neb.com

P7708S 07312101310 1

P7708S

175 mini-gel lanes Lot: 0731210 Exp: 10/13

1.05 ml Store at –20°C

Description: Prestained Protein Marker, Broad Range (7–175 kDa) is a mixture of purified proteins covalently coupled to a blue dye that resolves to 8 bands of even intensity when electrophoresed. The protein concentrations are carefully balanced for even intensity. The covalent coupling of the dye to the proteins affects their electrophoretic behavior in SDS-PAGE gels relative to unstained proteins (1). The apparent molecular weight of the prestained proteins are given in the table on this card. For precise molecular weight determinations, use NEB's unstained Protein Marker, Broad Range (NEB #P7702) or Protein Ladder (NEB #P7703) in addition to the prestained marker.

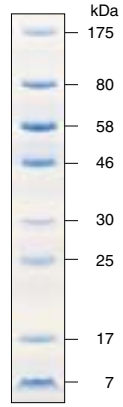
This Marker Was Recently Recalibrated Using The Protein Ladder (NEB #P7703). Revised Weights Are Shown.

Contents: 0.1–0.2 mg/ml of each protein in 70 mM Tris-HCl (pH 6.8 @ 25°C), 33 mM NaCl, 1 mM Na_2EDTA, 2% (w/v) SDS, 40 mM DTT, 0.01% (w/v) phenol red and 10% glycerol.

Storage Note: To maximize shelf-life, marker should be boiled upon receipt and aliquotted into single-use tubes. Store at –20°C.

Suggested Protocol for Loading a Sample (2):

1. Mix protein marker. Bring the desired amount of the Prestained Protein Marker over to a separate tube. For blotting: use 6 µl for mini-gels and 12 µl for full length gels. For visualizing during electrophoresis: use 15 µl for mini-gels and 30 µl for full length gels.
2. Heat the marker to 95–100°C for 3–5 minutes. If the marker has been already boiled upon receipt, don't heat again, directly go to Step 3.
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.



10-20% SDS PAGE

Prestained Protein Marker, Broad Range

PROTEIN	SOURCE	APPARENT MW (kDa)
MBP-β-galactosidase[1]	*E. coli*	175
MBP-paramyosin[1]	*E. coli*	80
MBP-CBD[1]	*E. coli*	58
CBD-*Mxe* Intein-2CBD[1]	*E. coli*	46
CBD-*Mxe* Intein[1]	*E. coli*	30
CBD-BmFKBP13	*E. coli*	25
Lysozyme	chicken egg white	17
Aprotinin	bovine lung	7

[1] MBP = maltose-binding protein. MBP-β-galactosidase = fusion of MBP and β-galactosidase.

MBP-paramyosin = fusion of MBP and paramyosin. MBP-CBD = fusion of MBP and chitin binding domain.

CBD-*Mxe* Intein = fusion of chitin binding domain and the *Mxe* Intein.

CBD-*Mxe* Intein-2CBD = fusion of the chitin binding domain, *Mxe* Intein followed by two chitin binding domains.

Note: Apparent molecular weights of every lot are determined on Invitrogen Novex 10–20% Tris-glycine SDS PAGE gels using NEB's Protein Ladder (NEB #P7703).

(See other side)

CERTIFICATE OF ANALYSIS

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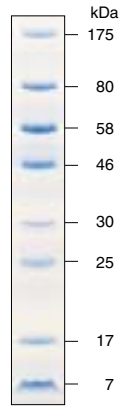

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(See other side)

CERTIFICATE OF ANALYSIS

10–20% Tris-glycine	10–20% Tris-tricine	4–12% Bis-Tris (MOPS)	4–12% Bis-Tris (MES)	3–8% Tris-acetate
175	141	138	126	148
80	66	66	63	72.5
58	48	48	45	52
46	35	35.5	35	40.5
30	27	25	25	n/a
25	24	17	17	n/a
17	19	12.5	12	n/a
7	13	9	7.5	n/a

Note: Apparent molecular weight values for prestained protein markers can be different when run on different gel types.

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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.

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