Prestained Protein Ladder, Broad Range (10–230 kDa)

1-800-632-7799
info@neb.com
www.neb.com

P7710S 008121113111

P7710S

100 mini gel lanes **Lot: 0081211**

0.5 ml **Store at –20°C** **Exp: 11/13**

Description: Prestained Protein Ladder, Broad Range (10–230 kDa) is a mixture of highly purified recombinant proteins covalently coupled to a blue dye that resolves into 12 sharp bands when electrophoresed. The protein concentrations are carefully balanced for even intensity. Both 80 kDa and 25 kDa bands have triple the intensity of other proteins and serve as reference indicators. The covalent coupling of the dye to the proteins affects their electrophoretic behavior on SDS-PAGE gels relative to unstained proteins (3). The apparent molecular weight of the Prestained Protein Ladder was determined on Invitrogen Novex 10–20% Tris-glycine SDS PAGE gels (1,2) by comparison to the Protein Ladder (NEB #P7703). The Prestained Protein Ladder is ideally suited for use in SDS-PAGE and western blotting applications. It allows continuous monitoring of protein separations during electrophoresis and also provides a quick and easy way to assess blotting efficiency (3).

Optimized for Tris-glycine gels. Not recommended for Tris-tricine or Bis-tris (with MES buffer) gels.

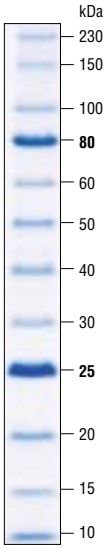
The Prestained Protein Ladder is designed for use with Tris-glycine gels.

Contents: 0.1–0.3 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 and 30% glycerol.

Storage Note: To maximize shelf-life, the Prestained Protein Ladder should be boiled for 3–5 minutes upon receipt and aliquotted into single-use tubes. Store at –20°C. Guaranteed stable for 1 year when properly stored.

Suggested Protocol for Preparing and Loading Protein Ladders:

1. Thaw the Prestained Protein Ladder at room temperature. Vortex gently to ensure the solution is homogeneous.
2. Transfer the desired amount of the Prestained Protein Ladder to a separate tube. For blotting: use 5 µl for mini-gels and 10 µl for full length gels. For visualizing during electrophoresis: use 10–15 µl for mini-gels and 20–30 µl for full length gels.
3. Heat the Prestained Protein Ladder at 95–100°C for 3–5 minutes. If this ladder has already been boiled for storage (see storage note), no further heating is necessary.
4. Load directly onto an SDS-PAGE gel and electrophorese.



Invitrogen Novex 10–20% Tris-glycine SDS-PAGE gel.

(see other side)

CERTIFICATE OF ANALYSIS

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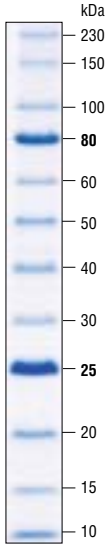

Invitrogen Novex 10–20% Tris-glycine SDS-PAGE gel.

(see other side)

CERTIFICATE OF ANALYSIS

Apparent Molecular Weights for Various Gel Types

10–20% Tris-glycine	4–12% Bis-tris (MOPS)	3–8% Tris-acetate
230	200	220
150	130	135
100	95	100
80	70	78
60	55	60
50	45	50
40	35	38
30	27	28
25	24	NA
20	20	NA
15	13	NA
10	7	NA

Note: Apparent molecular weight values for prestained protein markers can be different when run on different gel types. Due to poor resolution, NEB #P7710 is not recommended for use on Tris-tricine or Bis-tris (with MES buffer) gels.

References:

1. Laemmli, U.K. (1970) *Nature* 227, 680.
2. Sambrook, J., Fritsch, E.F. and Maniatis, T. (2001) *Molecular Cloning*: *A Laboratory Manual*, (3rd ed.), Cold Spring Harbor: Cold Spring Harbor Laboratory Press.
3. Ma, D. and Xu, M.Q., New England Biolabs, Inc., unpublished results.

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