

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



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



P7711S 014130814081

P7711S

100 mini-gel lanes **Lot: 0141308**
0.5 ml **Store at -20°C** **Exp: 8/14**

Description: ColorPlus 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 the orange 80 kDa and the green 25 kDa bands serve as the reference indicators. The covalent

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

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coupling of the dye to the proteins affects their electrophoretic behavior on SDS-PAGE gels relative to unstained proteins (3). The apparent molecular weights of the ColorPlus Prestained Protein Ladder bands were determined on Invitrogen Novex 10–20% Tris-glycine SDS-PAGE gels (1,2) by comparison to the Protein Ladder (NEB #P7703). The ColorPlus 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).

The ColorPlus 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 Na₂EDTA, 2% (w/v) SDS, 40 mM DTT and 30% glycerol.

Storage Note: To maximize shelf-life, the ColorPlus 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.

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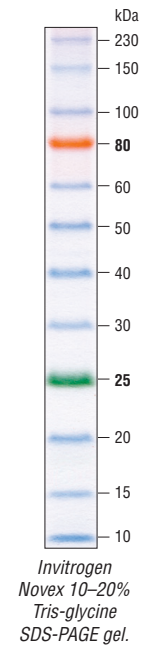
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Suggested Protocol for Preparing and Loading Protein Ladders:

1. Thaw the ColorPlus 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 ColorPlus 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 SDS-PAGE gel and electrophorese.



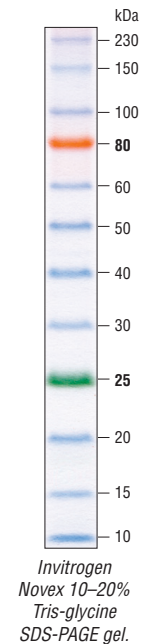
*Invitrogen
Novex 10–20%
Tris-glycine
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(see other side)

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*	76
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 #P7711 is not recommended for use on Tris-tricine or Bis-tris (with MES buffer) gels. *A second band can be observed at 165.

Page 2 (P7711)

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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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