

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



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



P7709S 024130314031

P7709S

175 mini-gel lanes Lot: 0241303
1.05 ml Store at -20°C Exp: 3/14

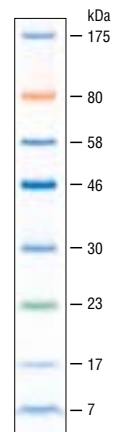
Description: ColorPlus Prestained Protein Marker, Broad Range includes a mixture of purified proteins covalently coupled to colored dye that resolves to 8 bands of even intensity, including one orange and one green reference band for easy orientation when electrophoresed (1). The covalent coupling of the dye to the proteins affects their electrophoretic behavior in SDS-PAGE gels relative to unstained proteins (1). 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.

Contents: 0.1–0.2 mg/ml of each protein in 50 mM NaCl, 63.5 mM Tris-HCl (pH 7.0 @ 25°C), 1 mM Na₂EDTA, 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 ColorPlus Protein Marker. Bring the desired amount of the ColorPlus 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

ColorPlus Prestained Protein Marker, Broad Range

| PROTEIN | SOURCE | APPARENT MW (kDa) |
|--|-------------------|-------------------|
| MBP-β-galactosidase ¹ | <i>E. coli</i> | 175 |
| MBP-truncated-β-galactosidase ¹ | <i>E. coli</i> | 80 |
| MBP-CBD ¹ | <i>E. coli</i> | 58 |
| CBD- <i>Mxe</i> Intein-2CBD ¹ | <i>E. coli</i> | 46 |
| CBD- <i>Mxe</i> Intein ¹ | <i>E. coli</i> | 30 |
| CBD- <i>E. coli</i> par ¹ | <i>E. coli</i> | 23 |
| Lysozyme | chicken egg white | 17 |
| Aprotinin | bovine lung | 7 |

¹ MBP = maltose-binding protein. MBP-β-galactosidase = fusion of MBP and β-galactosidase. MBP-truncated-β-galactosidase = fusion of MBP and a truncated β-galactosidase. MBP-CBD = fusion of MBP and chitin binding domain. CBD-*Mxe* Intein-2CBD = fusion of the chitin binding domain, *Mxe* Intein followed by two chitin binding domains. CBD-*E. coli* par = fusion of the chitin binding domain followed by and *E. coli* parvulin-like protein.

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

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



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



P7709S 024130314031

P7709S

175 mini-gel lanes Lot: 0241303
1.05 ml Store at -20°C Exp: 3/14

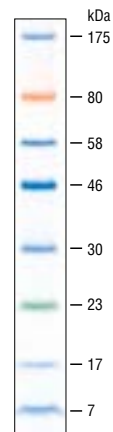
Description: ColorPlus Prestained Protein Marker, Broad Range includes a mixture of purified proteins covalently coupled to colored dye that resolves to 8 bands of even intensity, including one orange and one green reference band for easy orientation when electrophoresed (1). The covalent coupling of the dye to the proteins affects their electrophoretic behavior in SDS-PAGE gels relative to unstained proteins (1). 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.

Contents: 0.1–0.2 mg/ml of each protein in 50 mM NaCl, 63.5 mM Tris-HCl (pH 7.0 @ 25°C), 1 mM Na₂EDTA, 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 ColorPlus Protein Marker. Bring the desired amount of the ColorPlus 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

ColorPlus Prestained Protein Marker, Broad Range

| PROTEIN | SOURCE | APPARENT MW (kDa) |
|--|-------------------|-------------------|
| MBP-β-galactosidase ¹ | <i>E. coli</i> | 175 |
| MBP-truncated-β-galactosidase ¹ | <i>E. coli</i> | 80 |
| MBP-CBD ¹ | <i>E. coli</i> | 58 |
| CBD- <i>Mxe</i> Intein-2CBD ¹ | <i>E. coli</i> | 46 |
| CBD- <i>Mxe</i> Intein ¹ | <i>E. coli</i> | 30 |
| CBD- <i>E. coli</i> par ¹ | <i>E. coli</i> | 23 |
| Lysozyme | chicken egg white | 17 |
| Aprotinin | bovine lung | 7 |

¹ MBP = maltose-binding protein. MBP-β-galactosidase = fusion of MBP and β-galactosidase. MBP-truncated-β-galactosidase = fusion of MBP and a truncated β-galactosidase. MBP-CBD = fusion of MBP and chitin binding domain. CBD-*Mxe* Intein-2CBD = fusion of the chitin binding domain, *Mxe* Intein followed by two chitin binding domains. CBD-*E. coli* par = fusion of the chitin binding domain followed by and *E. coli* parvulin-like protein.

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

Apparent Molecular Weights for Various Gel Types

| 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 | 69 |
| 58 | 48 | 48 | 45 | 52 |
| 46 | 35 | 35.5 | 35 | 40.5 |
| 30 | 27 | 25 | 25 | n/a |
| 23 | 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.

Apparent Molecular Weights for Various Gel Types

| 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 | 69 |
| 58 | 48 | 48 | 45 | 52 |
| 46 | 35 | 35.5 | 35 | 40.5 |
| 30 | 27 | 25 | 25 | n/a |
| 23 | 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.

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

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.

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

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.