

Description

The PL00003 Extra Range Prestained Protein Marker is a ready-to-use three-color protein standard with 12 prestained proteins covering a wide range of molecular weights from 10 to 310 kDa in Tris-Glycine buffer. The PL00003 Extra Range Prestained Protein Marker is designed for monitoring protein separation during SDS-polyacrylamide gel electrophoresis, verification of Western transfer efficiency on membranes (nitrocellulose, PVDF, or nylon) and for estimating the size of proteins. The PL00003 Extra Range Prestained Protein Marker is also suitable for fluorescence WB detection.

Product Information

Approximately 0.1~0.4 mg/ml of each protein in the buffer (20 mM Tris-phosphate (pH 7.5 at 25°C), 2 % SDS, 0.2 mM Dithiothreitol, 3.6 M Urea, and 15 % (v/v) Glycerol).

Package

100 µL/250 µL ×2/250 µL ×10

Storage

Store product at 4°C for up to 12 weeks. For longer storage, aliquot and store at -20°C for up to 1 year.

Molecular Weight

~ 10, 15, 25, 35, 45, 60, 75, 100, 140, 180, 245, ~310 kDa

Number of Markers

12

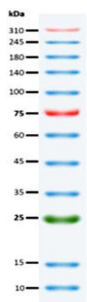
Size Range

10 to 310

Detection Method

Colorimetric

Validation Data



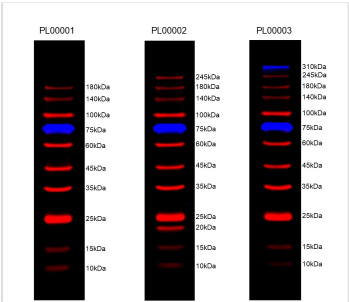
SDS-PAGE band profile of Extra Range Prestained Protein Marker: Migration patterns of Broad Range Prestained Protein Ladder in different electrophoretic conditions
The apparent molecular weight of each protein (kDa) has been determined by calibration of each protein against an unstained protein ladder in specific... electrophoresis conditions.

Band	Color	TRIS-GLYCINE	BIS-TRIS(MOPS)	BIS-TRIS(MES)
1	Red	~310	~290	~290
2	Blue	245	235	235
3	Blue	180	170	170
4	Blue	140	130	130
5	Blue	100	93	93
6	Red	75	70	72
7	Blue	60	53	53
8	Blue	45	41	42
9	Blue	35	30	30
10	Green	25	22	23
11	Blue	15	14	14
12	Blue	10	9	10

Migration patterns of Extra Range Prestained Protein Marker in different gel types: Note on apparent molecular weights: Depending upon the gel type used, the coupling of a charged dye molecule to a protein marker alters the overall charge of the protein and thus its mobility in a gel. This results in differences in observed molecular... weight of the protein markers between different gel types as shown in figure.



The prestained protein ladders were resolved in an 8-16% Tris-glycine gel (SDS-PAGE). The image shows a comparison of the migration patterns on the gel for our standard (PL00001), broad (PL00002), and extra broad (PL00003) range ladders.



Protein ladder tested with the Bio-Rad: 2 uL protein ladders were loaded in the 8%-18% Tris-glycine gel, then electrophoresed and transferred into the PVDF membrane. After blocking, this dual-channel image was taken directly by the Bio-Rad ChemiDoc MP Imaging System in the 550 nm (for 75 kDa and 310 kDa) and 680 nm (except 75 kDa and 310 kDa)... range.