



**SMOBIO**

Small Bio, Smart Tool

[www.smobio.com](http://www.smobio.com)

## Product Information

### ExcelBand 3-color Pre-Stained Protein Ladder, High Range (9-245 kDa)

#### PM5100

Size: 250  $\mu$ l  $\times$  2  
5  $\mu$ l per well for 100 applications

## Storage

4°C  $\geq$  3 months  
-20°C  $\geq$  24 months

## Loading Volume

- 3  $\mu$ l or 5  $\mu$ l per loading for clear visualization during electrophoresis on 15-well or 10-well mini-gel, respectively.
- 1.5~2.5  $\mu$ l per well for general Western transferring.
- Apply more for thicker (> 1.5 mm) or larger gel.

## Description

The PM5100 3-color Pre-Stained Protein Ladder is a ready to use three-color protein standard with 14 pre-stained proteins covering a wide range of molecular weights from 10 to 245 kDa in Tris-Glycine buffer (9 to 235 kDa in Bis-Tris (MOPS) buffer and 10 to 235 kDa in Bis-Tris (MES) buffer). Proteins are covalently coupled with different chromophores for easy identification of bands, with three reference proteins carrying enhanced intensity corresponding to a **blue** band at 20 kDa, **green** at 40 kDa, and **red** at 75 kDa, respectively, as separated on SDS-PAGE (Tris-glycine buffer).

The PM5100 3-color Pre-Stained Protein Ladder is designed for monitoring protein separation during SDS-polyacrylamide gel electrophoresis, verification of Western transfer efficiency on membranes (PVDF, nylon, or nitrocellulose) and for approximating the size of proteins.


The ladder is supplied in gel loading buffer and is ready to use. **Do NOT heat, dilute and add reducing agent before loading.**

## Contents

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).

## Guide for Molecular Weight Estimation (kDa)

Migration patterns of PM5100 3-color Pre-Stained Protein Ladder in different electrophoresis conditions are listed below:

Color	TRIS-GLYCINE	BIS-TRIS (MOPS)	BIS-TRIS (MES)	
Blue	245	235	235	
Blue	180	170	170	
Blue	140	130	130	
Blue	100	93	93	
Red	75	70	72	
Blue	60	53	53	
Blue	50	43	44	
Green	40	34	36	
Blue	35	30	30	
Blue	30	26	26	
Blue	25	22	23	
Blue	20	18	18	
Blue	15	14	14	
Blue	10	9	10	

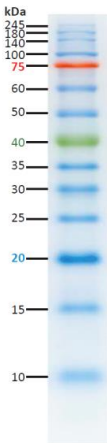
15% Tris-Glycine gel



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15% Tris-Glycine



**Note.** The apparent molecular weight (kDa) of each protein has been determined by calibration against an unstained protein standard; supplemental data should be considered for more accurate adjustment in different electrophoresis conditions.



## Quality Control

Under suggested conditions, PM5100 3-color Pre-Stained Protein Ladder resolves 14 major bands in 15% SDS-PAGE (Tris-glycine buffer) and after Western blotting to nitrocellulose membrane.

**Caution!** Not intended for human or animal diagnostic or therapeutic uses.

## Related Products

- PM1500 ExcelBand All Blue Regular Range Protein Marker, 250  $\mu$ l  $\times$  2
- PM1600 ExcelBand All Blue Regular Range Plus Protein Marker, 250  $\mu$ l  $\times$  2
- PM1700 ExcelBand All Blue Broad Range Protein Marker, 250  $\mu$ l  $\times$  2
- PM2400 ExcelBand Pink Blue Protein Marker, 250  $\mu$ l  $\times$  2
- PM2500 ExcelBand 3-color Regular Range Protein Marker, 250  $\mu$ l  $\times$  2
- PM2600 ExcelBand 3-color High Range Protein Marker, 250  $\mu$ l  $\times$  2
- PM2700 ExcelBand 3-color Broad Range Protein Marker, 250  $\mu$ l  $\times$  2
- PM5000 ExcelBand 3-color Pre-stained Protein Ladder, Regular Range, 250  $\mu$ l  $\times$  2
- PM5200 ExcelBand 3-color Pre-stained Protein Ladder, Broad Range, 250  $\mu$ l  $\times$  2
- PS1000 FluoroStain Protein Fluorescent Staining Dye (Red, 1,000X), 1 ml
- PS1001 FluoroStain Protein Fluorescent Staining Dye (Red, 1,000X), 1 ml  $\times$  5
- DM1160 FluoroBand 50 bp Fluorescent DNA Ladder, 500  $\mu$ l
- DM2160 FluoroBand 100 bp Fluorescent DNA Ladder, 500  $\mu$ l

- DM2360 FluoroBand 100 bp+3K Fluorescent DNA Ladder, 500  $\mu$ l
- DM3160 FluoroBand 1 KB (0.25-10 kb) Fluorescent DNA Ladder, 500  $\mu$ l
- DM3260 FluoroBand 1 KB Plus (0.1-10 kb) Fluorescent DNA Ladder, 500  $\mu$ l
- DM4160 FluoroBand XL 25 kb Fluorescent DNA Ladder, Broad Range (up to 25 kb), 500  $\mu$ l
- DL5000 FluoroDye DNA Fluorescent Loading Dye (Green, 6X), 1ml
- DS1000 ExcelStain DNA Fluorescent Staining Dye (Green, 10,000X), 500  $\mu$ l
- DS1001 ExcelStain DNA Fluorescent Staining Dye (Green, 10,000X), 500  $\mu$ l x 5
- VE0100 B-BOX™ Blue Light LED epi-illuminator, AC 100-240V, 50/60Hz