



**SMOBIO**

Small Bio, Smart Tool

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

## Product Information

### ExcelBand 3-color Pre-Stained Protein Ladder, Regular Range (9-180 kDa)

#### PM5000

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

## Storage

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

## Loading Volume

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

## Description

The PM5000 3-color Pre-Stained Protein Ladder is a ready to use three-color protein standard with 13 pre-stained proteins covering a wide range of molecular weights from 10 to 180 kDa in Tris-Glycine buffer (9 to 170 kDa in Bis-Tris (MOPS) buffer and 10 to 170 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 PM5000 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 PM5000 3-color Pre-Stained Protein Ladder in different electrophoresis conditions are listed below:

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



15% Tris-Glycine gel

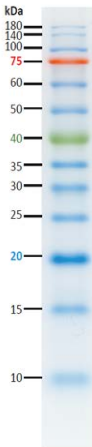


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PM5000



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, PM5000 3-color Pre-Stained Protein Ladder resolves 13 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
- PM5100 ExcelBand 3-color Pre-stained Protein Ladder, High 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 Fluorescen 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