



**SMOBio**

Small Bio, Smart Tool

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

## Product Information

ExcelBand™ series

### 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 for 3 months  
-20°C for 24 months

## Loading Volume

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

## Description

The ExcelBand™ 3-color Pre-Stained Protein Ladder, High Range (PM5100) 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, as separated on SDS-PAGE (Tris-Glycine buffer).

The ExcelBand™ 3-color Pre-Stained Protein Ladder, High Range (PM5100) 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 protein size.


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

Migration patterns and approximate MWs (kDa) of the ExcelBand™ 3-color Pre-Stained Protein Ladder, High Range (PM5100) in different electrophoresis conditions are listed below:

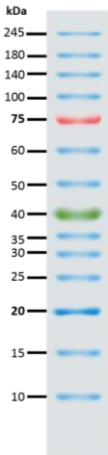
Band	Color	TRIS-GLYCINE	BIS-TRIS (MOPS)	BIS-TRIS (MES)	
1	Blue	245	235	235	
2	Blue	180	170	170	
3	Blue	140	130	130	
4	Blue	100	93	93	
5	Red	75	70	72	
6	Blue	60	53	53	
7	Blue	50	43	44	
8	Green	40	34	36	
9	Blue	35	30	30	
10	Blue	30	26	26	
11	Blue	25	22	23	
12	Blue	20	18	18	
13	Blue	15	14	14	
14	Blue	10	9	10	



**SMOBio**  
Small Bio, Smart Tool

**ExcelBand™**

**3-color Pre-Stained Protein Ladder, High Range  
PM5100**



**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 adjustments in different electrophoresis conditions.



## **Quality Control**

Under suggested conditions, ExcelBand™ 3-color Pre-Stained Protein Ladder, High Range (PM5100) resolves 14 major bands in SDS-PAGE (Tris-Glycine, MOPS, and MES buffer) and after Western blotting transfer to a nitrocellulose membrane.

## **Other information**

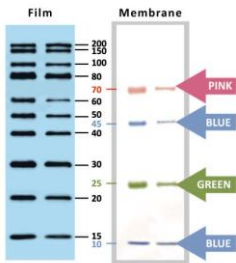
SMOBIO Technology, Inc. claims all warranties with respect to this document, expressed or implied, including but not limited to those of merchantability or fitness for a particular purpose. In no event shall SMOBIO Technology, Inc. be liable, whether in contract, tort, warranty, or under any statute or any other basis for special, incidental, indirect, punitive, multiple or consequential damages in connection with or arising from this document, including but not limited to the use thereof.

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
- PM2510 ExcelBand 3-color High Range Protein Marker, 250  $\mu$ l  $\times$  2
- PM2600 ExcelBand 3-color High Range Protein Marker, 250  $\mu$ l  $\times$  2
- PM2610 ExcelBand Enhanced 3-color High Range Protein Marker, 250  $\mu$ l  $\times$  2
- PM2700 ExcelBand 3-color Broad Range Protein Marker, 250  $\mu$ l  $\times$  2
- PM2800 ExcelBand 3-color Extra 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
- DM1100 ExcelBand 50 bp DNA Ladder, 500  $\mu$ l
- DM2200 AccuBand 100 bp DNA Ladder II, 500  $\mu$ l
- DM3100 ExcelBand 1 KB (0.25-10 kb) DNA Ladder, 500  $\mu$ l
- DM5100 ExcelBand Super Range DNA Ladder, (50 bp- 25 kb), 500  $\mu$ l
- VE0100 B-BOX™ Blue Light LED epi-illuminator, AC 100-240V, 50/60Hz
- WM1000 YesBlot Western Marker I, 250  $\mu$ l



YesBlot™ Western Marker I