



SMOBio

Small Bio, Smart Tool

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Product Information

ExcelBand™ series

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

PM5100

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

Storage

4°C for 3 months
-20°C for 24 months

Loading Volume

- **3 μ l** or **5 μ l** per loading for clear visualization during electrophoresis on a 15-well or 10-well mini-gel.
- **1.5~2.5 μ 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:

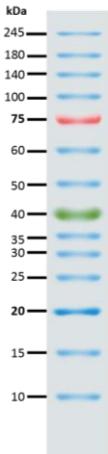
| Band | Color | TRIS-GLYCINE | BIS-TRIS (MOPS) | BIS-TRIS (MES) | |
|------|-------|--------------|-----------------|----------------|--|
| 1 | Blue | 245 | 235 | 235 |  |
| 2 | Blue | 180 | 170 | 170 | |
| 3 | Blue | 140 | 130 | 130 | |
| 4 | Blue | 100 | 93 | 93 | |
| 5 | Red | 75 | 70 | 72 | |
| 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 | |



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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

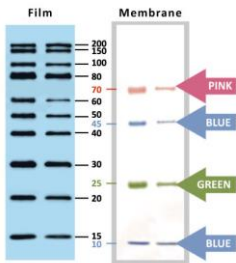
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Caution: Not intended for human or animal diagnostic or therapeutic uses.

Related Products

- PM1500 ExcelBand All Blue Regular Range Protein Marker, 250 μ l \times 2
- PM1600 ExcelBand All Blue Regular Range Plus Protein Marker, 250 μ l \times 2
- PM1700 ExcelBand All Blue Broad Range Protein Marker, 250 μ l \times 2
- PM2400 ExcelBand Pink Blue Protein Marker, 250 μ l \times 2
- PM2500 ExcelBand 3-color Regular Range Protein Marker, 250 μ l \times 2
- PM2510 ExcelBand 3-color High Range Protein Marker, 250 μ l \times 2
- PM2600 ExcelBand 3-color High Range Protein Marker, 250 μ l \times 2
- PM2610 ExcelBand Enhanced 3-color High Range Protein Marker, 250 μ l \times 2
- PM2700 ExcelBand 3-color Broad Range Protein Marker, 250 μ l \times 2
- PM2800 ExcelBand 3-color Extra Range Protein Marker, 250 μ l \times 2
- PM5000 ExcelBand 3-color Pre-stained Protein Ladder, Regular Range, 250 μ l \times 2
- PM5200 ExcelBand 3-color Pre-stained Protein Ladder, Broad Range, 250 μ l \times 2

- PS1000 FluoroStain Protein Fluorescent Staining Dye (Red, 1,000X), 1 ml
- DM1100 ExcelBand 50 bp DNA Ladder, 500 μ l
- DM2200 AccuBand 100 bp DNA Ladder II, 500 μ l
- DM3100 ExcelBand 1 KB (0.25-10 kb) DNA Ladder, 500 μ l
- DM5100 ExcelBand Super Range DNA Ladder, (50 bp- 25 kb), 500 μ l
- VE0100 B-BOX™ Blue Light LED epi-illuminator, AC 100-240V, 50/60Hz
- WM1000 YesBlot Western Marker I, 250 μ l



YesBlot™ Western Marker I