



SMOBio
Small Bio, Smart Tool

Product Information

ExcelBand™ series

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

PM5000

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, Regular Range (PM5000) 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, when separated on SDS-PAGE (Tris-glycine buffer).

The ExcelBand™ 3-color Pre-Stained Protein Ladder, Regular Range (PM5000) 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, Regular Range (PM5000) in different electrophoresis conditions are listed below:

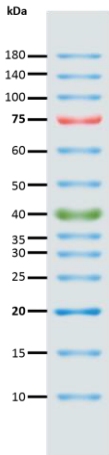
| Band | Color | TRIS-GLYCINE | BIS-TRIS (MOPS) | BIS-TRIS (MES) | |
|------|-------|--------------|-----------------|----------------|--|
| 1 | Blue | 180 | 170 | 170 |  |
| 2 | Blue | 140 | 130 | 130 | |
| 3 | Blue | 100 | 93 | 93 | |
| 4 | Red | 75 | 70 | 72 | |
| 5 | Blue | 60 | 53 | 53 | |
| 6 | Blue | 50 | 43 | 44 | |
| 7 | Green | 40 | 34 | 36 | |
| 8 | Blue | 35 | 30 | 30 | |
| 9 | Blue | 30 | 26 | 26 | |
| 10 | Blue | 25 | 22 | 23 | |
| 11 | Blue | 20 | 18 | 18 | |
| 12 | Blue | 15 | 14 | 14 | |
| 13 | 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, Regular Range (PM5000) resolves 13 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.