

## ColorMixed Protein Marker 250 (10–250 kDa)

Cat. No.: RM02949

Size: 250  $\mu$ L/2 $\times$ 250  $\mu$ L/10 $\times$ 250  $\mu$ L

### ◆ Description

This product is a ready-to-use three-color protein marker with a molecular weight range of 10–250 kDa. The concentration of each protein is approximately 0.1–0.4 mg/mL. When separated via SDS-PAGE using a Tris-glycine buffer system, two reference bands at 25 kDa and 70 kDa appear red, while all other bands are blue. This product can be used to monitor protein separation during SDS-PAGE electrophoresis, estimate the approximate molecular weight of proteins, and verify transfer efficiency in Western blotting.

### ◆ 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).

### ◆ Storage

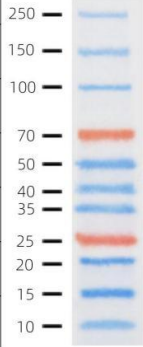
Store at 4°C for 3 months; store at -20°C for 3 years.

### ◆ Notice

1. Ready-to-use: Can be loaded directly without heating or dilution.
2. Two reference bands: 70 kDa (red), 25 kDa (red).
3. Recommended loading volume: 3–10  $\mu$ L per well. The volume should be adjusted appropriately according to the gel concentration and well size. For example, it is recommended to increase the loading volume by at least 2  $\mu$ L for low-concentration gels.
4. Applicable membrane types: PVDF membrane, nylon membrane, NC membrane.
5. The transfer efficiency is related to the transfer duration and should be determined based on the molecular weight of the target band. It is normal that some high-molecular-weight bands are not completely transferred after blotting.

# ◆ Guide for molecular weight estimation

The molecular weight of this rainbow protein Marker may shift in different electrophoresis buffers, for details please refer to the table below:

| 条带 | 颜色 | TRIS-GLYCINE/<br>kDa | BIS-TRIS(MOPS)/<br>kDa | BIS-TRIS(MES)/<br>kDa |  |
|----|----|----------------------|------------------------|-----------------------|-------------------------------------------------------------------------------------|
| 1  | 蓝色 | 250                  | 230                    | 230                   |                                                                                     |
| 2  | 蓝色 | 150                  | 140                    | 140                   |                                                                                     |
| 3  | 蓝色 | 100                  | 98                     | 98                    |                                                                                     |
| 4  | 红色 | 70                   | 63                     | 63                    |                                                                                     |
| 5  | 蓝色 | 50                   | 49                     | 49                    |                                                                                     |
| 6  | 蓝色 | 40                   | 39                     | 38                    |                                                                                     |
| 7  | 蓝色 | 35                   | 34                     | 33                    |                                                                                     |
| 8  | 红色 | 25                   | 22                     | 22                    |                                                                                     |
| 9  | 蓝色 | 20                   | 20                     | 21                    |                                                                                     |
| 10 | 蓝色 | 15                   | 15                     | 14                    |                                                                                     |
| 11 | 蓝色 | 10                   | 10                     | 9.8                   |                                                                                     |