

Cat#	Product Description	Packing
TI-MB-19001S	Three color mixed protein Marker 180	250 µL x 2units
TI-MB-19001L	Three color mixed protein Marker 180	250 µL x 10units

### Description

The Three ColorMixed Protein Marker 180 is a ready to use three-color protein standard with 10 pre-stained proteins covering a wide range of molecular weights from 10 to 180 kDa (9 to 170 kDa in Bis-Tris (MOPS) buffer and 10 to 170 kDa in Bis-Tris (MES) buffer). Proteins are covalently coupled with a blue chromophore except for two reference bands (one green and one red band at 25 kDa and 75 kDa respectively) when separated on SDS-PAGE (Tris-Glycine buffer).

This marker 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.

### 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

4°C for 3 months, -20°C for 2 years

### Notice

1. Ready to use: **Do NOT heat, dilute, or add reducing agents before loading**
2. Reference bands: 75 kDa (**red**), 25 kDa (**green**)
3. Loading Volume: 3-5 µL/well for mini gel; 1.5-2.5 µL/ well for Western transfer; 6-10 µL/well for large gel
4. Type of membranes: PVDF, nylon, or nitrocellulose

## Guide for Molecular Weight Estimation

Migration patterns and approximate MWs (kDa) of ColorMixed Protein Marker 180 in different electrophoresis conditions are listed below:

Band	Color	TRIS-GLYCINE / kDa	BIS-TRIS (MOPS) / kDa	BIS-TRIS (MES)/ kDa	
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	45	41	42	
7	Blue	35	30	30	
8	Green	25	22	23	
9	Blue	15	14	14	
10	Blue	10	9	10	