



## Low to High MW Protein Marker Prestained

Cat #:  MWM-020,  MWM-020-SPack Size:  500 µl,  30µl

Range: 5-245 kDa

Number of Bands: 13

Storage: -20°C

Stable for up to 2 weeks at 25°C,

Stable for up to 3 months at 4°C,

for long term storage, store at -20°C.

Feature: three-color, with a green dye at ~25 kDa, and a red dye at ~75 kDa.

### Kit Content:

S.No	Protein Marker	MWM-020	MWM-020-S
1	Low to High MW Protein Marker Prestained	500 µL	30 µL

### Introduction:

The Gene to Protein Broad Range MW Prestained Protein Marker is a three-color protein standard with 13 prestained proteins covering a wide range of molecular weights from 3.5 to 245 kilodalton (kDa). 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-polyacrylamide gel electrophoresis (SDS-PAGE) with Tris-glycine-SDS running buffer. The Gene to Protein Low Range MW Prestained Protein Marker is designed for monitoring protein separation during SDS-PAGE, verification of Western transfer efficiency on membranes (PVDF, nylon, or nitrocellulose), and approximating the size of proteins. The protein marker is supplied in a gel loading buffer and is ready to use. Do not heat, dilute, or add reducing agents before loading. Please note that the apparent molecular weight of each protein has been determined by calibration against unstained protein standards. For more accurate adjustments in different electrophoresis conditions, please refer to the supplemental data. All products are intended for research use only and should not be used for human or animal diagnostic or therapeutic purposes.

### Features

The Low Range MW Protein Marker Prestained covers a range of 3.5-245 kDa when used with Tris-glycine-SDS running buffer.

It is supplied in a ready-to-use loading buffer for direct loading on gels.

Easy identification of proteins due to the inclusion of green and red dye reference bands at ~25 kDa and ~75 kDa.

Produces sharp bands.

### Applications:

It is useful for monitoring protein migration during SDS-PAGE, verifying protein transfer efficiency onto membranes during Western blots, and estimating the size of proteins in SDS-PAGE and Western blots.

**Storage Buffer:** The Storage Buffer contains approximately 0.1~0.4 mg/ml of each protein in the buffer, which is composed of 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.

**Quality Control:** The Broad Range MW Protein Marker Prestained is tested for quality on a lot-to-lot basis to ensure consistent product quality.

continued

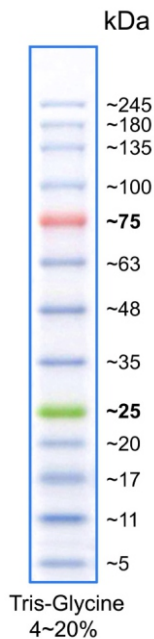
**Protocol:**

1. Thaw the marker at room temperature or at 37-40°C for a few minutes to dissolve precipitated solids. Do not boil.
2. Mix the marker thoroughly to ensure the solution is homogeneous.
3. Load the following volumes of the marker on the SDS-PAGE gel:
  - .For mini-gels, load 5 µl per well, or 2.5 µl per well for blots.
  - .For large gels, load 10 µl per well, or 5 µl per well for blots.
  - .If using a thicker (>1.5 mm) or larger gel, apply more of the marker.

**Note:**

1. The estimated molecular weight of each protein has been determined by calibration against unstained protein standards.
  2. Additional information should be consulted for more precise adjustments in varying electrophoresis conditions.
- All products are intended for research use only.

Warning: Not intended for human or animal diagnostic or therapeutic purposes.



The migration patterns of the Low to high MW Protein Marker Prestained in different electrophoresis conditions are listed below: