

# BlueRAY Prestained Protein Ladder



Cat. No.: SP006-0600  
Cat. No.: SP006-0025

Size: 300 µl x 2 vials  
Size: 25 µl

## Description

The BlueRAY Prestained Protein Ladder is a three-color protein standard with 10 prestained proteins covering a wide range molecular weights for 10 to 180 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 BlueRAY Prestained Protein Ladder is designed for monitoring protein separated during SDS-PAGE, verification of Western transfer efficiency on membranes (PVDF, nylon or nitrocellulose) and for approximate sizing of proteins. The ladder is supplied in gel loading buffer and is ready to use. Do not heat, dilute, and add reducing agent before loading.

## Features

- Broad range: 10-180 kDa (Tris-glycine-SDS running buffer)
- Ready-to-use: supplied in a loading buffer for direct loading on gels
- Easy to identify: includes the ~25, ~75 kDa reference bands coupled with a green and a red dye
- Sharp bands

## Applications

- Monitoring of protein migration during SDS-PAGE.
- Monitoring of protein transfer onto membranes during Western blots.
- Sizing of proteins on SDS-PAGE gels and Western blots.

## Storage Buffer

Approximately 0.2~0.4 mg/ml of each protein in buffer (20 mM Trisphosphate pH 7.5 at 25°C), 2% SDS, 0.2 mM Dithiothreitol, 3.6 M Urea, and 15% (v/v) Glycerol.

## Quality Control

The quality of the BlueRAY Prestained Protein Ladder is tested on a lot-to-lot basis to ensure consistent product quality.

## Storage

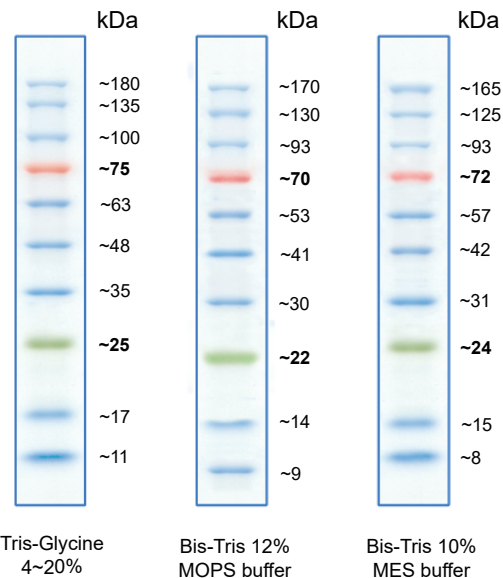
Stable for up to 2 weeks at 25°C.  
Stable for up to 3 months at 4°C.  
For long term storage, store at -20°C.

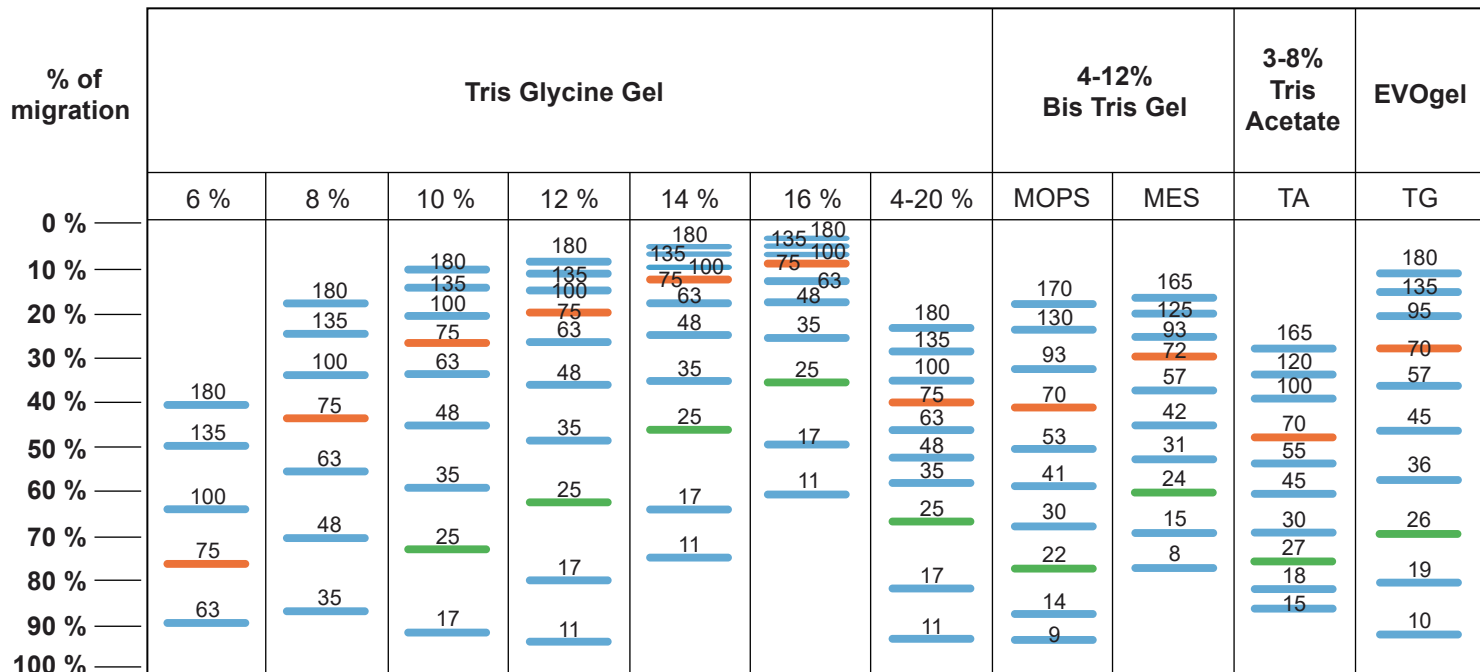
## BlueRAY Prestained Protein Ladder Protocol

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

## Guide for Molecular Weight Estimation (kDa)

Migration patterns of BlueRAY Prestained Protein Ladder in different electrophoresis conditions are listed below:





Note:

1. The apparent molecular weight of each protein has been determined by calibration against an unstained protein ladder in each electrophoresis condition.
  2. Supplemental data should be considered for more accurate adjustment.
- All products are for research use only.

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