

## BlueAQUA Prestained Protein Ladder

Cat. No. PM019-0500 Size: 500 µl

Cat. No. PM019-0025 Size: 25 µl

### Description

The BlueAQUA Prestained Protein Ladder is a blue protein standard with 11 prestained proteins covering a wide range of molecular weights from 10 to 180 kilodalton (kDa). Proteins are covalently coupled with a blue chromophore, and two reference bands (at 25 kDa and 72 kDa respectively) are enhanced in intensity when separated on SDS-polyacrylamide gel electrophoresis (SDS-PAGE) with Tris-glycine-SDS running buffer. The BlueAQUA Prestained Protein Ladder 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. The ladder is supplied in gel loading buffer and is ready to use. Do not heat, dilute, 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, ~72 kDa reference bands enhanced the intensity
- 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 and Western blots.

### Storage Buffer

Approximately 0.1-0.5 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).

### Quality Control

The quality of BlueAQUA 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.

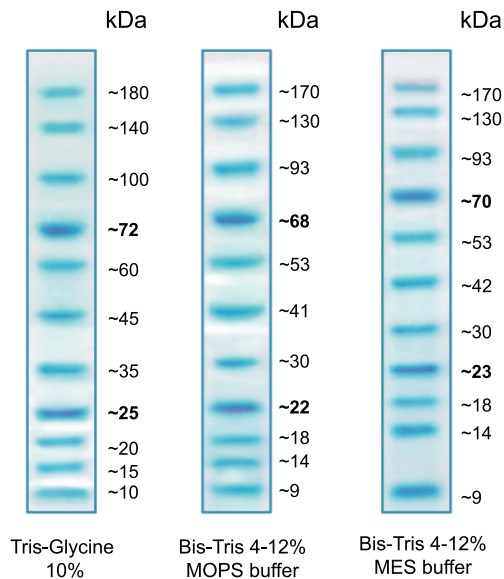
For long term storage, store at -20°C.

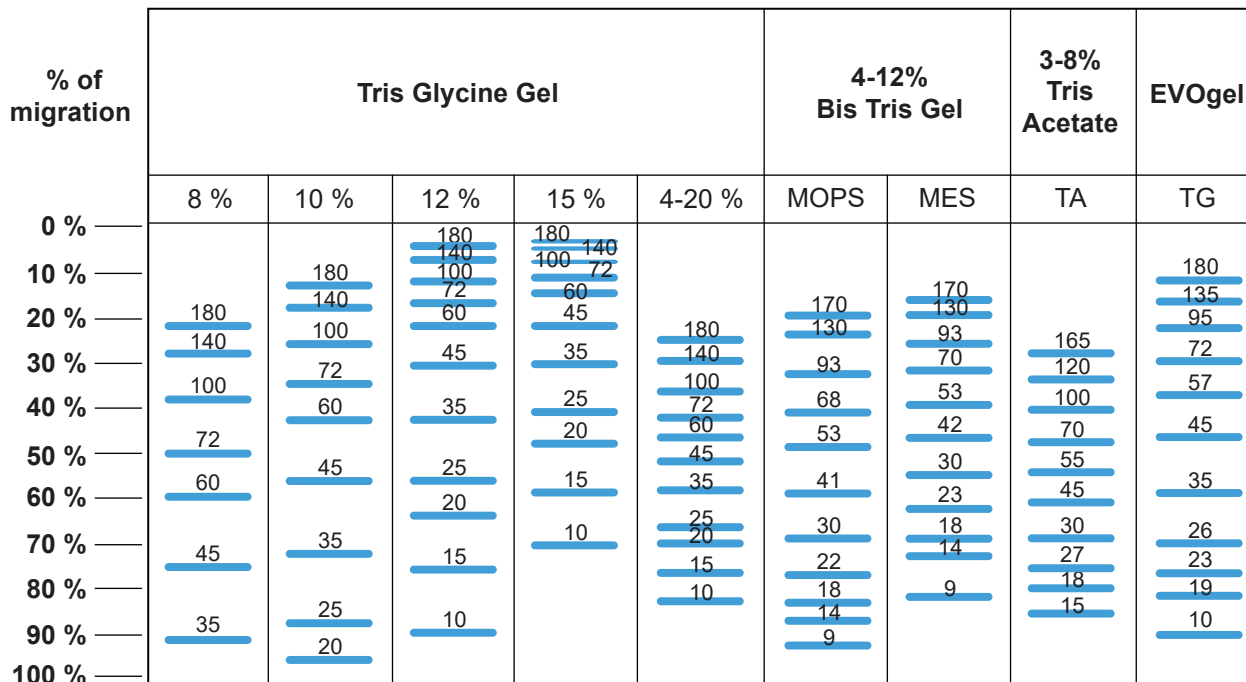
### BlueAQUA Prestained Protein Ladder Protocol

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 BlueAQUA 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.