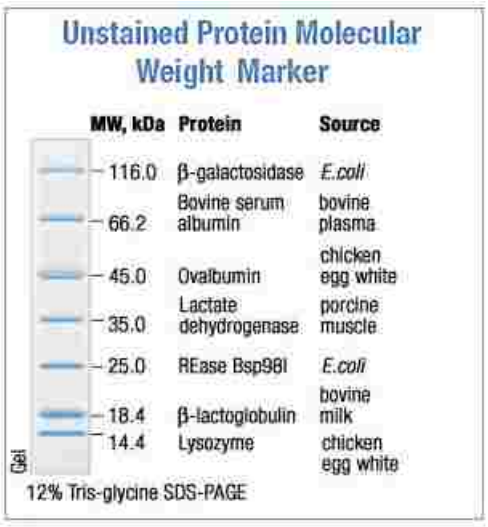
# PRODUCT INFORMATION

## Unstained Protein Molecular Weight Marker

***Product information for BSM0431:***

### Description

Unstained Protein Molecular Weight Marker is designed for accurate sizing of proteins in SDS-polyacrylamide gel electrophoresis, as well as on PVDF, nylon and nitrocellulose membranes. It is a mixture of 7 native proteins ranging in size from 14.4 kDa to 116 kDa.




### Applications

Accurate protein sizing on SDS-polyacrylamide gels and Western blots.

### Content

0.1-0.2 mg/ml of each protein in 62.5 mM Tris-HCl (pH 7.0 at 25°C), 1 mM EDTA, 2% SDS, 50 mM DTT, 30 mM NaCl, 1 mM $NaN_3$, 0.01% bromophenol blue and 50% glycerol.

### Recommendations for Loading

1. Thaw the marker at room temperature for a few minutes to dissolve precipitated solids. Vortex gently.
2. It is recommended to divide the marker into several aliquots to avoid contamination of the stock solution.
3. Heat an aliquot of the ladder for 5 minutes at 95°C for complete denaturizing proteins. Cool at room temperature, mix and use the following volumes of the ladder on SDS-


20 Konrad Cres, Markham Ontario L3R 8T4 Canada
Tel: (905) 474 4493, (800) 313 7224 Fax: (905) 474 5794
Email: order@biobasic.com Web: www.biobasic.com

polyacrylamide gel:
-5 µl per well for mini gel
-10 µl per well for large gel

Use the same volumes for Western blotting application. The loading volumes listed above are recommended for gels with a thickness of 0.75-1.0 mm. The loading volume should be doubled for 1.5 mm thick gels.

4. Remainder of the denatured marker aliquot can be stored at –20°C for further use.

## Note

1. To avoid overloading gels which will be subsequently silver stained, dilute the ladder in protein loading buffer just prior to use.

| | |
|---|---|
| Water, nuclease-free | 35.5 µl |
| 4× Protein Loading Buffer | 12.5 µl |
| 20×Reducing Agent | 1 µl |
| Protein ladder | 1 µl |

Load 5 µl of the diluted ladder per well for a mini gel/blot and 10 µl per well for a large gel/blot.

2. Store denatured marker at -20°C.
3. Because of the SDS presence in storage buffer the Marker should not be used in a native polyacrylamide gel electrophoresis for determining native molecular weights of proteins.
4. Additional bands observed in the gel image of the protein ladder might be caused by DTT oxidation in the storage buffer. Add freshly prepared DTT solution to a final concentration of 50 mM. Heat an aliquot of the marker for 5 minutes at 95°C. Cool at room temperature and mix well.

## Storage

Store at -20°C.


20 Konrad Cres, Markham Ontario L3R 8T4 Canada
Tel: (905) 474 4493, (800) 313 7224 Fax: (905) 474 5794
Email: order@biobasic.com Web: www.biobasic.com