PM31-Unstained Protein Molecular Weight Marker

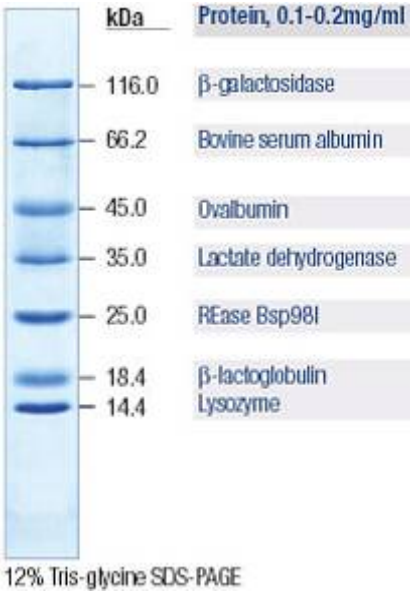
100μl
For 10~20 applications
Store at -20°C

Features

- Sharp bands.
- Size range: 14.4-116 kDa.
- Supplied in a loading buffer for direct loading on gels.

Description

The Unstained Protein Molecular Weight Marker is designed for precise sizing of proteins by SDS-polyacrylamide gel electrophoresis. It is a mixture of 7 proteins (14.4-116 kDa) which appear as sharp bands after SDS-polyacrylamide gel electrophoresis when stained with Protein Staining Solution. The Unstained Protein Molecular Weight Marker can be used in Western blotting on PVDF, nylon and nitrocellulose membranes.



12% Tris-glycine SDS-PAGE

Application

Accurate protein sizing on SDS-polyacrylamide gels.

Composition

0.1-0.2 mg/ml of each protein in 62.5 mM Tris-HCl (pH 7.5 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.

Quality Control

Tested in SDS-polyacrylamide gel electrophoresis.

Recommendations for Loading

1. Thaw the marker either at room temperature or at 37-40°C for a few minutes.
2. Mix gently, but thoroughly, to ensure that the solution is homogeneous.
3. Remove the required amount of the marker from the stock solution and transfer it to a clean tube with a screw cap.
4. Heat this tube at 95°C for 5 minutes to completely denature proteins.
5. Chill on ice.
6. Load the following volumes of the marker on SDS-polyacrylamide gel:
   - 5 μl per well for mini-gels;
   - 10 μl per well for large gels.

Note

- The indicated loading volume is recommended for gels with a thickness of 0.75 mm. For thicker gels, the loading volume should be increased.
- Once denatured the marker can be further used just after the thawing by omitting the steps 3-5 in the above protocol.
- A separation gel resolves proteins effectively according to their molecular weight. Linear gradient gels are used for resolution of both small and large proteins, while low percentage gels are recommended for analysis of large proteins. In these gels, small proteins migrate with the tracking dyes during electrophoresis.
- For silver staining (9), the volume of Unstained Protein Molecular Weight Marker used should be decreased up to 10-fold.

PM41- Prestained Protein Molecular Weight Marker

100µl
For 10~20 applications
Store at -20°C

Features

- Size range: 20-120 kDa.
- Ready-to-use - supplied in a loading buffer for direct loading on gels.

Description

The Prestained Protein Molecular Weight Marker is designed for monitoring protein separation during SDS-polyacrylamide gel electrophoresis, verification of Western transfer efficiency and approximate sizing of proteins. The marker is a mixture of 6 proteins with the apparent molecular weights from 20 kDa to 120 kDa. All proteins of the marker are covalently coupled to a blue chromophore.
The Prestained Protein Molecular Weight Marker can be used in Western blotting on PVDF, nylon and nitrocellulose membranes.

Application

- Monitoring of protein migration during SDS- polyacrylamide gel electrophoresis.
- Monitoring of protein transfer onto membranes during Western blotting.
- Sizing of proteins on SDS-polyacrylamide gels and Western blots.

Composition

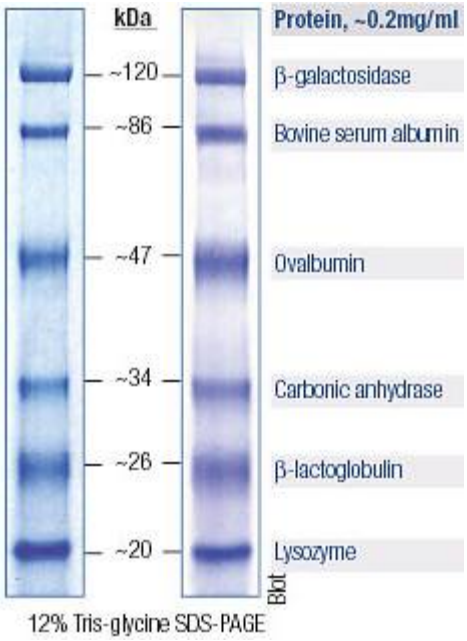
Approximately 0.2 mg/ml of each protein in 62.5 mM Tris-HCl (pH 7.5 at 25°C), 1 mM EDTA, 2% SDS, 10 mM DTT, 1.5 mM NaN_3 and 33% glycerol.

Quality Control

Tested in SDS-polyacrylamide gel electrophoresis and Western blotting.

Recommendations for Loading

1. Thaw the marker either at room temperature or at 37-40°C for a few minutes to dissolve precipitated solids. Do not boil.
2. Mix gently, but thoroughly, to ensure that the solution is homogeneous.
3. Load the following volumes of the marker on SDS-polyacrylamide gel:
   - 5 µl per well for mini-gels, 3 µl per well for blots;
   - 10 µl per well for large gels, 6 µl per well for blots.



12% Tris-glycine SDS-PAGE

Note

- The indicated loading volume is recommended for gels with a thickness of 0.75 mm. For thicker gels, the loading volume should be increased.
- Each lot of Prestained Protein Molecular Weight Marker is calibrated against a precisely sized Unstained Protein Molecular Weight Marker in Tris-glycine gel and the calculated apparent molecular weights are reported in the product's Certificate of Analysis.
- Prestained proteins can have different mobilities in various SDS-PAGE-buffer systems. However, they are suitable for approximate molecular weight determination when calibrated against unstained standards in the same system.
- A separation gel resolves proteins effectively according to their molecular weight. Linear gradient gels are used for resolution of both small and large proteins, while low percentage gels are recommended for analysis of large proteins. In these gels, small proteins migrate with the tracking dyes during electrophoresis.

PM61-Unstained Protein Ladder

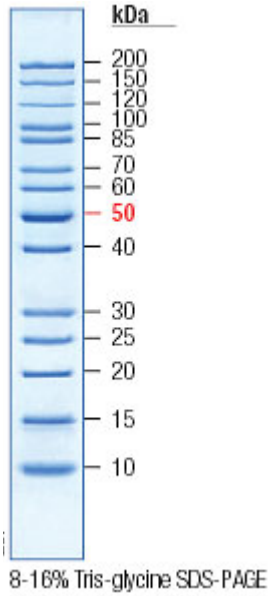
100µl
For 10~20 applications
Store at -20°C

Features

- Broad range: 10-200 kDa.
- Ready-to-use – supplied in a loading buffer for direct loading on gels.
- Sharp bands.
- Includes a 50 kDa reference band of a greater intensity.
- Each protein in the ladder contains an integral Strep-tag® II sequence.

Description

The Unstained Protein Ladder is designed for accurate sizing of proteins by SDS-polyacrylamide gel electrophoresis. It is a mixture of 14 recombinant, highly purified, unstained proteins that appear as sharp bands from 10 kDa to 200 kDa on SDS-polyacrylamide gel after staining with Protein Staining Solution. Unstained Protein Ladder can also be used in Western blotting on PVDF, nylon and nitrocellulose membranes for precise sizing of blotted proteins.
Each protein in the ladder contains an integral Strep-tag® II sequence which can be detected directly on Western blots using a Strep-Tactin®-AP* conjugate or an antibody against Strep-tag® II.
Strep-tag® II detection systems are not supplied by Mylab.



8-16% Tris-glycine SDS-PAGE

Application

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

Composition

0.02-0.05 mg/ml of each protein in 62.5 mM Tris-H_3PO_4 (pH 7.5 at 25°C), 1 mM EDTA, 2% SDS, 100 mM DTT, 1 mM NaN_3, 0.01% bromophenol blue and 33% glycerol.

Quality Control

Tested in SDS-polyacrylamide gel electrophoresis and Western blotting.

Recommendations for Loading

4. Thaw the ladder either at room temperature or at 37-40°C for a few minutes to dissolve precipitated solids. Do not boil.
5. Mix gently, but thoroughly, to ensure that the solution is homogeneous.
6. Load the following volumes of the ladder on SDS-polyacrylamide gel:
   - 5 µl per well for mini-gels;
   - 10 µl per well for large gels.

Note

- The indicated loading volume is recommended for gels with a thickness of 0.75 mm. For thicker gels, the loading volume should be increased.
- A separation gel resolves proteins effectively according to their molecular weight. Linear gradient gels are used for resolution of both small and large proteins, while low percentage gels are recommended for analysis of large proteins. In these gels, small proteins migrate with the tracking dyes during electrophoresis.
- For silver staining (9), the volume of Unstained Protein Molecular Weight Marker used should be decreased up to 10-fold.