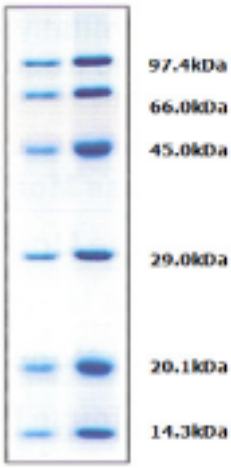
PD100-001 Protein marker 14.3 ~ 97.4 kDa

Product: PD100-001 Protein marker 14.3 ~ 97.4 kDa
CATALOG: FH0070-0001
Quantity: 1 vial (500 ul/vial)
One vial sufficient for 50 uses (Western blotting)
One vial sufficient for 10 uses (large gels 16 x 18 cm)
One vial sufficient for 25 uses (mini gels 8 x10 cm)
Storage Condition: -20°C

Description

The Unstained SDS-PAGE Molecular Weight Marker is a mixture of 6 purified proteins supplied pre-diluted with gel loading buffer for direct loading to an SDS-polyacrylamide gel electrophoresis (1). The proteins resolve into sharp, tight bands in the range of 14.3 kDa to 97.4 kDa when analyzed by SDS-PAGE and stained with Coomassie Blue.



Unstained SDS-PAGE Molecular Weight Marker was run on a 8 x 10 cm, 4-20 % precast gel and stained with Coomassie Brilliant Blue R-250.

SPECIFICATIONS

Contents:

Constituent Proteins of Unstained SDS-PAGE Molecular Weight Marker (Approximately 0.1-0.2mg/ml of each protein listed below).

Storage Buffer:

50 mM Tris-HCl (pH 7.0 at 25°C), 1 mM EDTA,
2 % SDS, 50 mM DTT,
50 mM NaCl, 1.5 mM NaN3, 0.01% bromophenol blue and 10 % glycerol.

Volume:

1vial (500 ul)

Shipping and Storage:

The Unstained SDS-PAGE Molecular Weight Marker is shipped at room temperature. For maximum stability and long-term use, store at –20 °C. The marker is stable for one year when stored properly.

Application:

Molecular weight determination of polypeptides in various gel systems.

Load Volume:

0.75 mm - thick mini gels – 10 µL
1.0 mm - thick mini gels – 15 µL
1.5 mm - thick large gels – 25 µL

Recommended Gel Percentage:

12.5 % (37.5:1 Acrylamide:Bis-Acrylamide)
The marker can be run on the other percentage (8-15 %) gels. 8-10 % gels may cause proteins with low molecular weights to migrate with the dye front. On 12-15 % and gradient gels all bands are visible.

Methods and ProceDures:

1. Thaw the marker at room temperature or heat for a few minutes at 37-40 °C. Vortex gently to ensure the solution is homogeneous.
2. It is recommended to divide the marker into several aliquots to avoid contamination of the stock solution. Remove the required amount of marker from the stock solution and transfer to a clean tube.
3. Heat this tube at 95 °C for 5 minutes for complete denaturation of proteins. Cooled and mixed solution is ready for loading on an SDS-PAGE gel.
4. Load the marker on an SDS-PAGE gel and run.
5. The marker is optimized for use with Coomassie Brilliant Blue staining but also can be used with other gel staining methods (copper staining, silver staining, etc.).

NOTE

Since silver staining is 10 to 100 times more sensitive than Coomassie Blue staining, the amount of marker applied should be decreased accordingly.

6. Store denatured marker at - 20°C.
7. For the further loading thaw the marker at room temperature or heat at 37-40 °C for a few minutes, then vortex.
8. 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.

Quality Control

5 µL of marker run on an 12.5 % SDS-PAGE (mini-gel) and stained with Coomassie Brilliant Blue provide 6 bands of equal color intensities.

References

1. Laemmli, U.K., Cleavage of structural proteins during the assembly of the head of bacteriophage T4, Nature, 227, 680-685, 1970

BIONOVAS Biotechnology Co., Ltd.
647-808-8236
No. 194 kingsdale Ave, Toronto. Ontario. M2N3W9