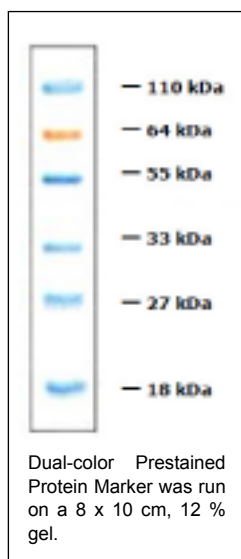


## PD100-003 Protein marker 18 ~ 110 kDa

<b>Product:</b>	PD100-003 Protein marker 18 ~ 110 kDa
<b>CATALOG:</b>	FH0080-0500
<b>Quantity:</b>	1 vial (500 ul/vial) One vial sufficient for 200 uses (Western blotting) One vial sufficient for 50 uses (large gels 16 x 18 cm) One vial sufficient for 100 uses (mini gels 8 x 10 cm)
<b>Storage Condition:</b>	-20°C

### Description

The Dual-color Prestained Protein Marker is a mixture of purified proteins covalently coupled to a blue and orange chromophore. It consists of 6 proteins ranging in apparent molecular weight from approximately 18 kDa to 110 kDa. The protein concentrations are optimized to yield 5 blue bands and 1 orange band after SDS-polyacrylamide gel electrophoresis. The marker is supplied pre-diluted with gel loading buffer for direct loading onto an SDS-polyacrylamide gel.



### SPECIFICATIONS

#### Contents:

Calibrated Molecular Weight of Dual-color Prestained Protein Marker (Approximately 0.2-0.4 mg/ml of each protein listed below).

#### NOTE:

Covalently coupled chromophore affects protein mobility. Dual-color Prestained Protein Marker should be used only for approximate molecular weight determination. Each batch of Dual-color prestained protein marker is calibrated against unstained standards; apparent molecular weight is reported in the product's Certificate of Analysis.

#### Storage Buffer:

50 mM Tris-HCl (pH 7.5 at 25°C), 1 mM EDTA, 2 % SDS, 10 mM DTT, 1.5 mM NaN<sub>3</sub> and 10 % glycerol.

#### Volume:

500 ul x 1

#### Shipping and Storage:

The Dual-color Prestained Protein 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. For short-term use, store at 4°C.

### Application

Dual-color Prestained Protein Marker is suitable for visualizing proteins during electrophoresis without staining and for monitoring electrophoretic transfer onto membranes.

### Load Volume

0.75 mm - thick mini gels – 5 µL  
1.0 mm - thick mini gels – 10 µL  
1.5 mm - thick large gels – 20 µL

### Recommended Gel Percentage

12 % (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 at 37-40 °C for a few minutes to dissolve precipitated solids. Do Not Boil!
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. Vortex gently to ensure the solution is homogeneous.
4. Load the marker on an SDS-PAGE gel and run.

#### NOTE:

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% SDS-PAGE (mini-gel) provide 6 bands of equal color intensities.

### References

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

Note Components are also sold separately.

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