

Color Prestained Protein Marker (10~180 kDa)

REF: EG23301-S/M

Storage Condition

Store at 4°C for 3 months, and at -20°C for 36 months.

Components

Component	EG23301S	EG23301M
Color Prestained Protein Marker (10~180 kDa)	250 µl	5×250 µl

Description

Color Prestained Protein Marker (10~180 kDa) is a tri-color pre-stained ready-to-use protein molecular weight standard that contains 10 known molecular weight pre-stained standard proteins with a molecular weight range of 10~180 kDa. After SDS-PAGE gel electrophoresis or Western blot transfer, clear 10 colored protein bands can be observed, with the 70 kDa band appearing red, the 10 kDa band appearing green, and the remaining 8 bands appearing blue. The concentration of each protein band is approximately 0.1~0.4 mg/ml.

Notice

1. This product should not be subjected to repeated freeze-thaw cycles. Please aliquot and store at -20°C .
2. The separation efficiency of this product is dependent on the concentration of the PAGE gel. In low concentration gels (<8%), lower molecular weight proteins may migrate faster than the dye; if the separation gel concentration is around 10%, bands below 25 kDa may not separate well, but this does not affect bands of 25 kDa and above. For target proteins with a molecular weight below 25 kDa, it is recommended to use a 15% separation gel.
3. This product is suitable for common Western blot membranes such as PVDF, nylon, and cellulose acetate membranes. The transfer efficiency is related to the transfer time and should be adjusted according to the molecular weight of the target protein. If the transfer time is short, it may result in the incomplete transfer of some high molecular weight bands.
4. This product contains a small amount of DTT. For your safety and health, please wear lab coats and disposable gloves when handling.

Protocol

1. This product is a ready-to-use liquid. After taking out of the refrigerator, allow it to completely thaw at room temperature and gently mix, then it can be directly loaded. There is no need for heating, dilution, or addition of reducing agents.
2. For SDS-PAGE gel electrophoresis, load 5 µl per well for Mini-gels (0.75 mm~1.0 mm); for Western Blot analysis, load 2~3 µl per well. If the separation gel concentration is lower than 8%, the gel thickness is ≥1.5 mm, or for Large-gels, an appropriate increase in the amount used may be necessary.

Molecular Weight Guide

The standard proteins in this product have been covalently linked to the dye. In different gel concentrations or electrophoresis buffer, the migration characteristics may change, and the actual molecular weight represented by each pre-stained band may also vary slightly. Please refer to the table below for specifics.

Gel type	Tris-Glycine						Bis-Tris						Tris-Acetate		Hepes-Tris	
	8%	10%	12.5%	15%	B4-20%	W4-20%	G4-12%	G8-16%	G4-20%	G4-12%	G8-16%	G4-20%	G10%	6%	T3-8%	W4-20%
Running buffer	Tris-Glycine						MES			MOPS			Tris-Acetate		Hepes	
Apparent Molecular Weights, kDa																
%length of gel	10	180	180	180	180	180	180	180	180	180	180	180	180	180	180	180
	20	180	130	130	100	100	130	130	130	130	130	130	130	130	130	130
	30	130	72	75	55	55	180	65	65	65	65	65	65	65	65	65
	40	100	55	43	33	33	100	55	55	55	55	55	55	55	55	55
	50	70	43	33	25	25	70	33	33	33	33	33	33	33	33	33
	60	55	33	25	17	17	55	25	25	25	25	25	25	25	25	25
	70	43	25	17	17	17	43	17	17	17	17	17	17	17	17	17
	80	33	17	10	10	10	33	10	10	10	10	10	10	10	10	10
	90	33	17	10	10	10	17	10	10	10	10	10	10	10	10	10
	100	33	17	10	10	10	17	10	10	10	10	10	10	10	10	10