

AceColor™ p retained Protein marker (25-400 kDa)

Cat. No.	A1058
Pack Size	2*250µL/Tube, 100mL/Bottle, 1L/Bottle
Appearance	Dark blue solution
Storage Buffer	20mM Tris-H ₃ PO ₄ (pH7.5), 2mM EDTA, 1.5% (W/V) SDS, 15% (W/V) Glycerol, 4M Urea, 3mM DTT, 0.1% (V/V) Proclin3
Quality Control	Tested in SDS-PAGE and western blotting
Shelf life	Stable at -20°C for 36 months ; 4°C for 3 months ; 25°C for 4 weeks

Description

AceColor™ Prestained Protein Ladder contains 10 highly purified and prestained recombinant proteins spanning a molecular weight range from 25 kDa to 400 kDa (25, 45, 72, 100, 130, 160, 200, 250, 300, 400 kDa). The 72 kDa and 400 kDa bands are orange-red, while the 25 kDa band is green. Apparent molecular weights have been calibrated against unstained protein standards from vendor B (Cat. No. 1610363) and vendor T (Cat. Nos. 26610 and 26614).

This ladder is ideal for determining protein molecular weights during SDS-PAGE and Western blotting. The broad range of molecular weights facilitates dynamic monitoring of protein separation, clear visualization of protein bands, and accurate estimation of target protein sizes. After electrophoresis and transfer onto PVDF or nitrocellulose membranes, the colored protein bands allow easy assessment of transfer efficiency during Western blot experiments. Recommended loading volumes are 5–10 µL per well.

Important Information :

This product is supplied as a convenient, ready-to-use formulation. It does not require heating, dilution, or the addition of reducing agents.

1. For Western blotting applications, larger proteins (>100 kDa) may require extended transfer times or increased current for effective transfer. It is recommended to avoid adding SDS to the transfer buffer. If SDS must be used, keep the concentration below 0.05%.
2. Prestained protein bands may exhibit different mobilities in various SDS-PAGE buffer systems. In low-percentage gels (<10%), low-molecular-weight proteins may migrate close to the dye front; their positions should be considered as approximate references when estimating target protein sizes.
3. It is recommended to perform electrophoresis using either a 12% separating gel or a 4–20% gradient gel.

Preparation :

1. This product is provided as a ready-to-use formulation. Prior to loading, thaw at room temperature for several minutes and gently mix to ensure homogeneity.

(Do not boil, dilute, or add reducing agents!)

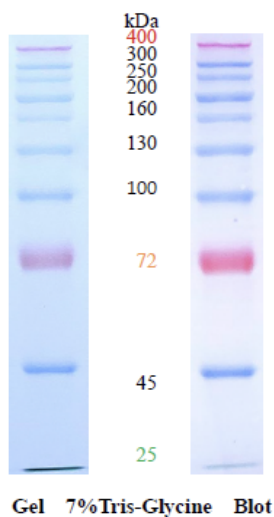
2. Load 5 µL of the ladder into each gel well for SDS-PAGE. If wells are wider, the loading volume may be slightly increased as needed.

It is recommended for first-time users to perform preliminary experiments to determine optimal loading volumes tailored to their specific experimental conditions and preferences. This practice helps to achieve high-quality results while minimizing reagent consumption.

3. For regular use, store the product at 2–8°C for up to 3 months. Aliquoting is advised to avoid repeated freeze-thaw cycles.

Migration patterns of Prestained Protein Ladder :

The apparent molecular weight of each protein (kDa) has been determined by calibration against an unstained protein ladder in each electrophoresis.



Gel type	Tris-Glycine			Tris-Acetate		Bis-Tris	
	6%	7%	B4-20%	6%	T3-8%	T4-12%	T4-12%
Gel concentration							
Running buffer	Tris-Glycine			Tris-Acetate		MES	MOPS
Apparent Molecular Weights, kDa							
% length of gel	10						
	20	400	400	350	350	350	350
	30	300	300	300	300	300	300
	40	250	250	250	250	250	250
	50	200	200	200	200	200	200
	60	160	160	160	160	160	160
	70	130	130	130	130	130	130
	80	100	100	100	100	100	100
	90	72	72	70	70	65	65
	100	45	45	45	45	45	45
	25	25	25	25	25	25	

Product Use Limitation

For Research Use Only. Not for Diagnostic Purposes.