For Research Use Only Prestained Protein Marker

Catalog Number: PL00001



www.ptglab.com

Product Information The PL00001 Prestained Protein marker is a ready to use three-color protein

standard with 10 prestained proteins covering a wide range of molecular weights from 10 to 180 kDa. The PL00001 Prestained Protein Marker is designed for monitoring protein separation during SDS-polyacrylamide gel electrophoresis, verification of Western transfer efficiency on membranes, (PVDF, nylon, or nitrocellulose) and for estimating the size of proteins. The PL00001 Prestained

Protein marker is also suitable for fluorescence WB detection.

Product Information Approximately 0.1~0.4 mg/ml of each protein in the buffer (20 mM Tris-phosphate

(pH 7.5 at 25°C), 2 % SDS, 0.2 mM Dithiothreitol, 3.6 M Urea, and 15 % (v/v)

Glycerol).

Package 100uL/500uL

Storage Store product at 4°C for up to 12 weeks. For longer storage, aliquot and store at -

20°C for up to 1 year.

Molecular Weight ~ 10, 15, 25, 35, 45, 60, 75, 100, 140, 180 kDa

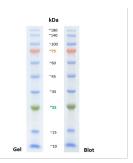
Number of Markers 10

Size Range 10 to 180

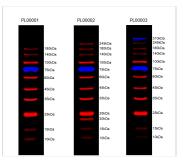
Stain Type 3 colors: Blue, Red, Green

Detection Method Colorimetric

Validation Data



SDS-PAGE band profile of Prestained Protein Ladder: Resolution of the prestained protein ladder in a 10-20% Tris-glycine gel (SDS-PAGE). The image shows the migration pattern in the gel and after transfer to a PVDF membrane.



Protein ladder tested with the Bio-Rad: 2 ul protein ladders were loaded in the 8%-18% gel, then electrophoresed and transformed into the PVDF membrane. After blocking, this dual-channel image was taken directly by the Bio-Rad ChemiDoc MP Imaging System in the 550 nm (for 75k Da and 310 kDa)... range.

Gel Type Gel Concentration Running Buffer		Tris-Glycine								Tris-Acetate		Bis-Tris					
		4-20% 10-20			-20%	8% 12%			3-8%		4-12%		10%		12%		
		Tris-Glycine								Tris	Tris-Acetate		MES				
	Apparent Molecular Sizes (kDa)																
	10				~389 ~343				-180 -140				~170 ~130		-133		-12
% Length of Gel	20		~180 ~140		~100			=	~200				193 193	Gas.	-32		*53
	30	Ξ.	~100	Ξ	~60		~180	_	~60		~180		-51	-	^53	-	~42
	40	•	-75		~45		7100	_	~45		~140	Ξ	-42	•	~42	_	~30
	50	1	~60 ~65		^35	-					~100			-	~30	-	-23
	60	-	~45			7	~75	-	~35		*75	•	-30		~23		
	70	-	~85	-	-25	-	~50	_	-95		760	۳	-23				
	80		-25		~20	-	~45	_			-00	-	-34	-	~14	•	*54
	90			-				_	-20		-26						
	100	-	~20	-	~15		735		*25		-25	-	~93	-	*22	-	*50

Migration patterns of Prestained Protein Ladder in different electrophoretic conditions: Note on apparent molecular weights: Depending upon the gel type used, the coupling of a charged dye molecule to a protein marker alters the overall charge of the protein and thus its mobility in a gel. This results in differences in observed molecular... weight of the protein markers between different gel types as shown in Figure 2.