For Research Use Only Prestained Protein Marker (10-180 kDa)



Catalog Number: PL00001

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	250 μL × 2							
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



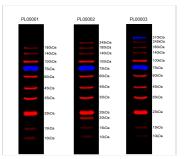
SDS-PAGE band profile of Prestained Protein Ladder: The prestained protein ladder was resolved in a 10-20% Tris-glycine gel (SDS-PAGE). The image shows the migration pattern in the gel and after transfer to a PVDF membrane.

Gel Type	Tris-Glycine							Tris	Acetate	Bis-Tris								
Gel Concentration Running Buffer		tion 4-20%		10-20%			8%		12%		3-8%		4-12%		10%		12%	
		Tris			Tris-G	Blycine				Tris-Acetate				1	MES			
	ecular	ular Sizes (kDa)																
	10				~380 ~543				~180 ~140				~170 ~130		728		-12	
% Length of Gel	20		~180 ~140	-	~100			=	~200			-	-33	-			-12	
	30	-	~100		~50		~180	-	~60		~180		-51	-	~53	-	~42	
	40	-	-75		~45		7100	-	~15		~140		-12	-	~42	-	~30	
	50	_	~60		~35	-					~100			-	~30	-	-23	
	60	-	~45			-	~75	-	-25		-75	-	-90		-23			
	70	-	~85	-	-25	-	~50	-	-25	1	~60	۳	-23			1		
	80	-	-25		~20						-45	-	-14	-	~14	-	*54	
	90					-	~45		~20		-25							
	100	-	~20	-	~15	_	~35	_	- 25		-25	-	~20	-	~20	-	*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.



The prestained protein ladders were resolved in an 8-16% Tris-glycine gel (SDS-PACE). The image shows a comparison of the migration patterns on the gel for our standard (PL00001), broad (PL00002), and extra broad (PL00003) range ladders.



Protein ladder tested with the Bio-Rad: 2 uL protein ladders were loaded in the 8%-18% Tris-glycine 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 75 kDa and 310 kDa) and 680 nm (except 75 kDa and 310 kDa)... range.