

Related Products for Electrophoresis

Catalog #	Description
161-0363	Precision Plus Protein Unstained Standards , 1,000 μ l
161-0396	Precision Plus Protein Unstained Standards Value Pack , 5 x 1000 μ l
161-0373	Precision Plus Protein All Blue Standards , 500 μ l
161-0393	Precision Plus Protein All Blue Standards Value Pack , 5 x 500 μ l
161-0374	Precision Plus Protein Dual Color Standards , 500 μ l
161-0394	Precision Plus Protein Dual Color Standards Value Pack , 5 x 500 μ l
161-0377	Precision Plus Protein Dual Xtra Standards , 500 μ l
161-0397	Precision Plus Protein Dual Xtra Standards Value Pack , 5 x 500 μ l
161-0385	Precision Plus Protein™ WesternC™ Pack , Precision Plus Protein WesternC Standards and StrepTactin-HRP, 50 applications
161-0398	Precision Plus Protein WesternC Value Pack , 250 applications
161-0747	4x Laemmli Sample Buffer , 10 ml
161-0786	Bio-Safe™ Coomassie Stain , 1 L

Coomassie is a trademark of BASF Aktiengesellschaft.

Tween is a trademark of ICI Americas Inc.

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For more information, go to www.bio-rad.com.

Precision Plus Protein™ Kaleidoscope™ Standards Instruction Manual

Single unit

Catalog #161-0375

5-Pack value pack

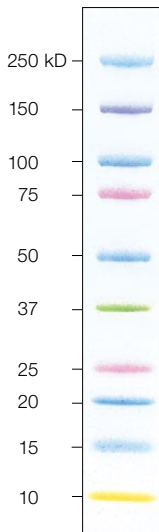
Catalog #161-0395

Product shipped at
room temperature.

Store at -20°C for 12 months.

BIO-RAD

Representative lot
of Precision Plus
Protein Kaleidoscope
prestained standards
on a Criterion™
4–20% Tris-HCl Gel



The Precision Plus Protein standards are the latest generation of recombinant proteins designed to provide a ladder of convenient, consistent sizes. These standards continue the tradition of accuracy and ease of use begun by Precision Protein™ standards, while also providing instant orientation, even greater accuracy, particularly in the 10–25 kD range.

The Precision Plus Protein Kaleidoscope standards provide a broad range recombinant ladder with multiple colors that allow for easy band referencing and blot orientation.

Note: Prestained standards may fade during blocking, antibody incubation, or washing steps due to the use of Tween-20 in buffers. For other options, contact Bio-Rad Technical Support at 1-800-424-6723.

Product Description

Precision Plus Protein Kaleidoscope standards contain ten protein bands of 10, 15, 20, 25, 37, 50, 75, 100, 150, and 250 kD.

Recombinant prestained protein standards are carefully engineered for precise and accurate molecular weights. The staining process has been optimized to guarantee the same electrophoretic molecular weight with each lot. Traditional prestained proteins, on the other hand, are blended from naturally occurring proteins. They have an inherent variability in the amount and location of dye that covalently binds to the protein; this produces diffuse, broader bands than those of the recombinant prestained standards and the resulting molecular weights vary from lot to lot.

Molecular Weight Estimation

The molecular weights of Precision Plus Protein Kaleidoscope standards are confirmed by migration in a Laemmli SDS-PAGE system. Using Precision Plus Protein Kaleidoscope standards, the molecular weight of an unknown protein can be assessed at an accuracy of 95%. For electrophoretic determination of molecular weights at an accuracy of >95%, Precision Plus Protein Unstained standards (catalog #161-0363) should be used.

These standards are also compatible with the XT buffer system, but should only be used for molecular weight estimation. For molecular weight determination on XT gels, use the Precision Plus Protein Unstained or All Blue standards.

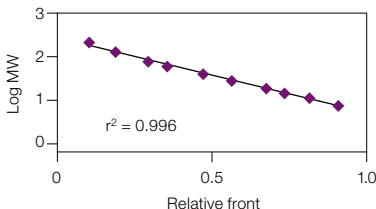


Fig. 1. r^2 plot for Precision Plus Protein Kaleidoscope standards determined on a Criterion 4–20% gel. r^2 values >0.99 are typical for Precision Plus Protein Kaleidoscope standards.

Instructions for Use

Precision Plus Protein Kaleidoscope standards are provided in loading buffer, ready to load, with no dilution required. Allow the tube to reach room temperature and thoroughly mix before use. This will ensure that any solids that may have precipitated have returned to solution. Do not heat the product above room temperature.

Recommended Loading Volumes

Load Volume	Application
5 μ l	Blotting mini (8.3 W x 6.4 L cm) and midi (13.3 W x 8.7 L cm) gels, monitoring transfer
10 μ l	Mini and midi gel electrophoresis
20 μ l	Large (18.3 W x 19.3 L cm) gel electrophoresis

Specifications

Catalog #	161-0375, single unit 161-0395, 5-pack value pack
Volume	500 μ l
Number of applications	50, single unit 250, 5-pack value pack
Loading buffer	30% (w/v) glycerol, 2% SDS, 62.5 mM Tris, pH 6.8, 50 mM DTT, 5 mM EDTA, 0.02% NaN_3 , 0.01% bromophenol blue
Shelf life	12 months at -20°C ; if the product has been stored as directed for longer than 12 months, the shelf life may be extended by adding dithiothreitol (DTT) to 50 mM
Total protein concentration	1.5 mg/ml