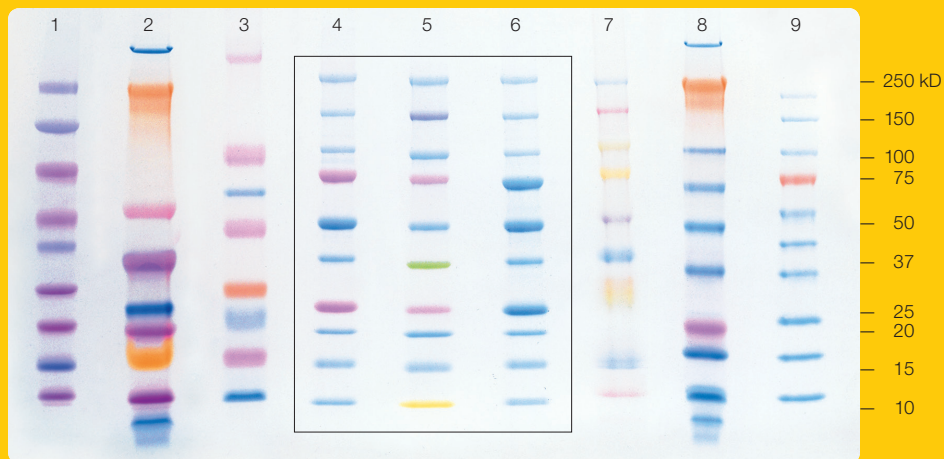# Comparison of Multicolor Prestained Protein Standards

Precision Plus Protein™* prestained all blue, dual color, and Kaleidoscope™ standards offer matching migration patterns and nonshifting bands for every color.


Prestained standards run on a Bio-Rad Criterion™ 4–20% precast gel in Tris/glycine/SDS running buffer at 200 V for 60 min. Molecular weights shown are for Precision Plus Protein standard bands.

1 Cambrex ProSieve color protein markers
2 Invitrogen MultiMark multicolored standard
3 Sigma ColorBurst electrophoresis markers
4 Bio-Rad Precision Plus Protein dual color standards
5 Bio-Rad Precision Plus Protein Kaleidoscope standards
6 Bio-Rad Precision Plus Protein all blue standards
7 Amersham Biosciences full-range Rainbow protein molecular weight markers
8 Invitrogen SeeBlue Plus2 prestained protein standards
9 Fermentas prestained protein ladder

Precision Plus Protein Standards Family

Unstained   All Blue   Dual Color   Kaleidoscope
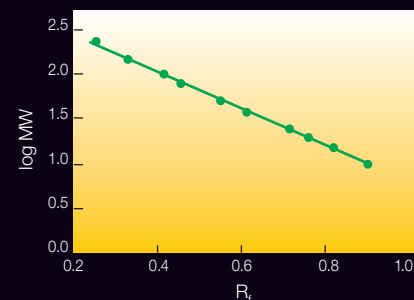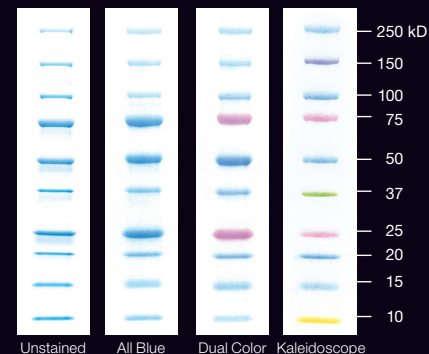
Exceptional linearity of Precision Plus Protein standards. The standard curve was generated by plotting the log molecular weight (MW) versus the migration distance (R_f) of each protein standard band through an SDS-PAGE gel. Precision Plus Protein Kaleidoscope standards showed $r^2 = 0.996$, demonstrating a strong linear relationship between the proteins' log molecular weight and migration distance on a gel. All Precision Plus Protein prestained and unstained standards generate standard curves with r^2 values > 0.99.

BIO-RAD

Outstanding Standards for Western Blotting

Precision Plus Protein™ unstained standards consistently produce sharp, clean signals with sensitive detection systems.

1 2 3 4 5 6 7 8

1 2 3 4 5 6 7 8 9 10

Western blot detection of Green Fluorescent Protein (GFP) and unstained Precision Plus Protein standards using the Immun-Star™ horseradish peroxidase (HRP) chemiluminescent detection kit. Maximum sensitivity achievable with Immun-Star HRP is 1–3 pg. A gel run with 0.5 µl of standards (lane 1) and a dilution series of E. coli lysate containing overexpressed GFP (lanes 2–8) was transferred to a PVDF membrane. The blot was probed with a primary antibody specific for GFP, then incubated with StrepTactin-HRP and a secondary antibody conjugated to HRP. After incubation in the Immun-Star HRP detection solution for 2 min, the blot was exposed to film for 10 sec.
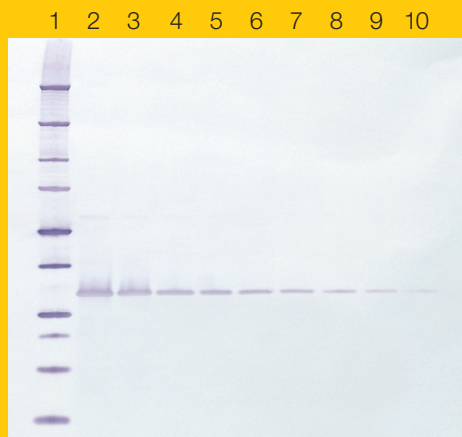
Western blot detection of GFP and unstained Precision Plus Protein standards using the Immun-Blot® alkaline phosphatase (AP) colorimetric detection kit. Maximum sensitivity achievable with Immun-Blot AP is 100 pg. A gel run with 4 µl of standards (lane 1) and a dilution series of E. coli lysate containing overexpressed GFP (lanes 2–10) was transferred to a PVDF membrane. The blot was probed with a primary antibody specific for GFP, then incubated with StrepTactin-AP and a secondary antibody conjugated to AP. The blot was developed using the Immun-Blot AP kit.

Ordering Information

Catalog #	Description
161-0375	Precision Plus Protein Kaleidoscope Standards, 50 applications
161-0374	Precision Plus Protein Dual Color Standards, 50 applications
161-0373	Precision Plus Protein All Blue Standards, 50 applications
161-0363	Precision Plus Protein Unstained Standards, 100 applications
161-0380	Precision Protein™ StrepTactin-HRP Conjugate, 150 applications
161-0382	Precision Protein StrepTactin-AP Conjugate, 150 applications

For more information on Precision Plus Protein standards and blotting, request bulletin 2847.

StrepTactin is a trademark of Institut für Bioanalytik GmbH. *Strep*-tag technology for western blot detection is covered by US patent 5,506,121 and by UK patent 2,272,698. StrepTactin is covered by German patent application P 19641876.3. Bio-Rad Laboratories, Inc. is licensed by Institut für Bioanalytik GmbH to sell these products for research use only.