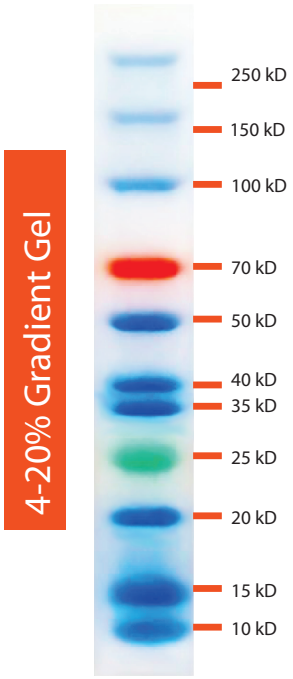
Cat #: 83-660

PROMETHEUS®
Protein Biology Products

Prometheus Prestained Protein Ladders

Size: 500 µl
Storage: -80°C for up to 2 years; -20°C for up to 1 year



83-660 (3 color)

Description:

83-660: Tri-Color prestained protein ladder (10-250 kD, a green band at 25 kD and a red band at 70 kD)

Prometheus Prestained Protein Ladders are a mixture of recombinant proteins ranging from 10 kD to 250 kD. Red or green bands at 70kD and 25 kD provide easy references for molecular weight identification. The molecular weights of the prestained ladders are confirmed in Tris-Glycne SDS-PAGE system with an accuracy of >95% by using unstained protein ladders. The protein ladders are highly stable with minimal band broadening during storage. Products are conveniently packaged and ready to use, with no heating, diluting or additional reducing agent required.

Instructions:

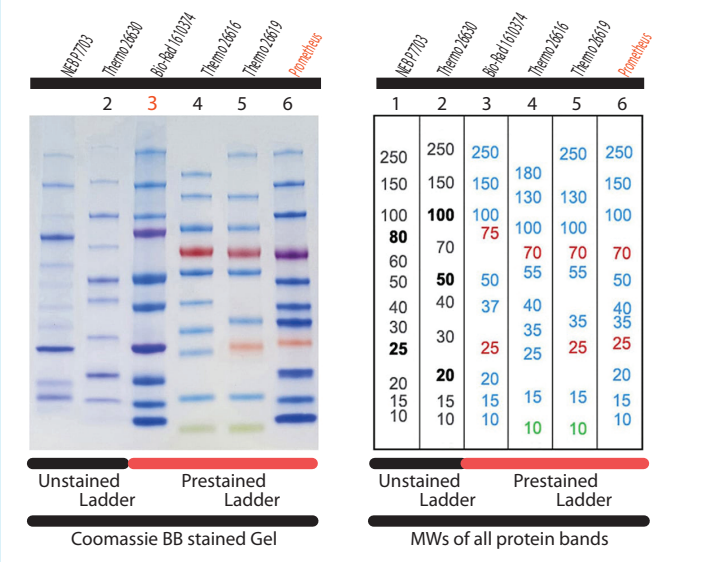
Thaw the ladder at room temperature and thoroughly mix before use. Do not heat or boil protein ladder. For use, load an appropriate volume of the ladder onto the gel. Routinely, 5 µL per well is suitable for a regular mini gel of 0.75-1.00 mm thick. After use, return the product to proper storage.

Storage buffer:

62.5mM Tris-HCl (pH 7.5 at 25°C), 1mM EDTA, 2% (w/v) SDS, 10mM DTT, 1mM NaN3 and 30% (v/v) glycerol

Prometheus Prestained protein ladder has high precision:

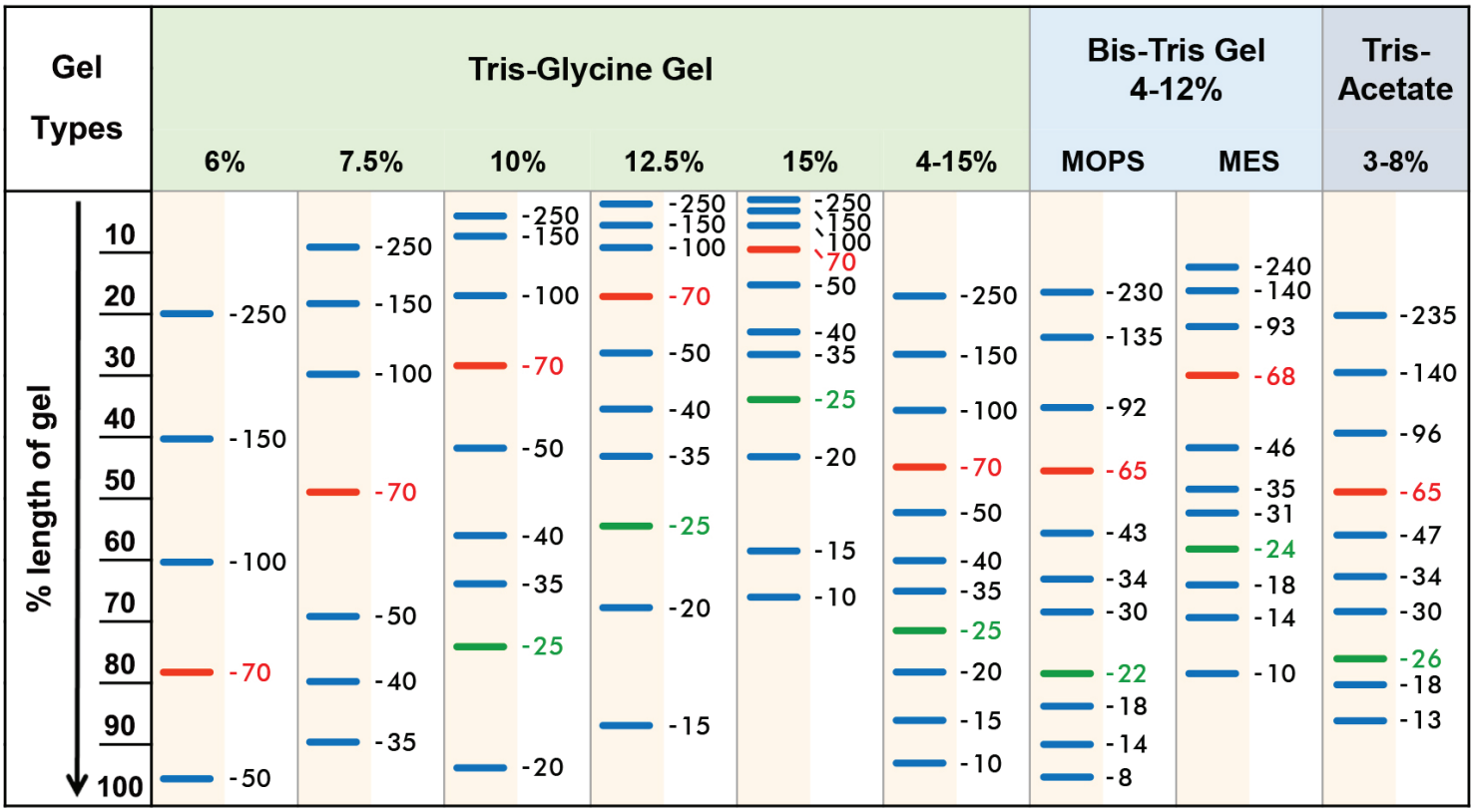
To perform molecular weight (MW) size precision evaluation, both unstained and prestained ladders were resolved on a 4-15% gradient SDS-PAGE Gel (BioRad #4561083) followed by Coomassie BB staining (left panel).MWs of all protein bands were indicated at their migration positions (right panel). As seen in lane 3, 4 and 5, some prestained protein bands show significant MWs inconsistencies between BioRad's and Thermo's products. Similar inconsistent bands are also observed between two ladders from the same manufacturer (Thermo #26616 and #26619). Generally, unstained protein ladders are considered to be more precise. Here, two unstained ladders (Thermo #26630 and NEB #7703, a third-party's product) were included as standard references (lane 1&2). When compared with unstained ladders, there are obvious imprecise prestained bands in both popular brands' products.Interestingly, the MWs of Thermo's prestained ladders (#26616 and #26619) do not match their own unstained protein ladder (#26630). There are no significant imprecise bands in the Prometheus ladder (lane 6). It should be noted that presteined ladders were originally designed for approximative MW reference and therefore, neither represent an absolute standard.



**The evaluation was performed on a Tris-Glycine buffer system
The mobility of prestained proteins can vary in different SDS-PAGE buffer systems.

Shipment and storage:

Product is shipped at ambient temperature and can be stored refrigerated for up to 3 months or frozen at -20° for up to 2 years. For long term storage we recommend storing ladders at -80°C. When you subpackage, product should be equilibrated at 4°C overnight and let it stay at room temperature until completely thawed. Mix thoroughly to make sure no insoluble precipitate occurs. If necessary, warm it at 37°C to dissolve any precipitate (no heat!). Aliquoting recommended. Store all aliquots above or at -20°C for one year.



Recommended Products

PROTEIN PURIFICATION

Ni-NTA Agarose Beads

Cross-linked Beads, 6%

Cat #'s: 20-512, 20-513, 20-514

PROTEIN DETECTION

ProSignal® ECL Reagents

Pico, Dura, and Femto

Cat #'s: 20-300B, 20-301B, 20-302B

PROTEIN VISUALIZATION

ProSignal® ECL Blotting Films

5 x 7in and 8 x 10in, 100 Sheets

Cat #'s: 30-507L , 30-810L