

Product information

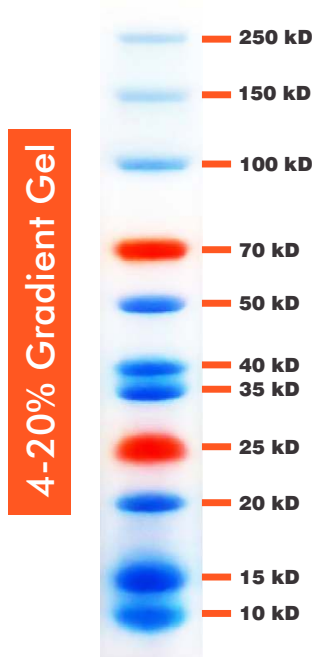
QF 24 V4
CV1 2018

Bio Basic Prestained protein ladders

Catalog #: BZ0010R
Size: 500 ul
Storage: -20°C for up to 1 year

Description:

BZ0010R: Dual-Color prestained protein ladder (10-250 kD, two red bands at 25 kD and 70 kD)

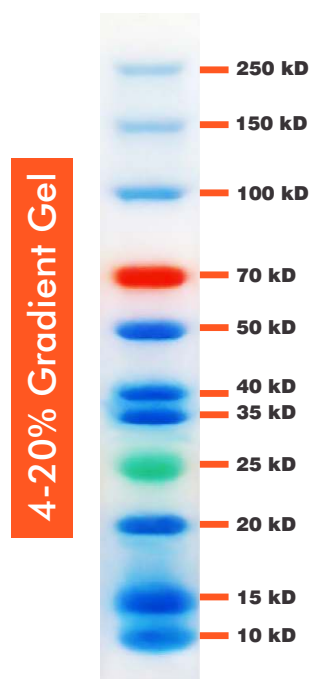


BZ0010R (2 color)

Catalog #: BZ0011G
Size: 500 ul
Storage: -20°C for up to 1 year

Description:

BZ0011G: Tri-Color prestained protein ladder (10-250 kD, a green band at 25 kD and a red band at 70 kD)



BZ0011G (3 color)

Bio Basic 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-Glycine 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:

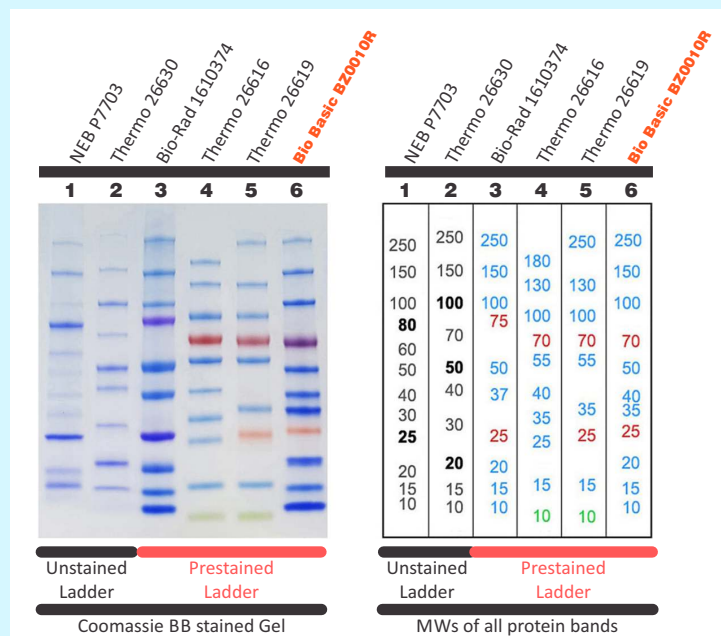
Thaw the ladder at room temperature and thoroughly mix before use. Do not heat or boil protein ladder. For use, load an appropriate volume of the ladder onto the gel. Routinely, 5 µL per well is suitable for a regular mini gel of 0.75-1.00 mm thick. After use, return the product to proper storage.

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

Bio Basic 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 Bio Basic ladder (lane 6). It should be noted that prestained ladders were originally designed for approximative MW reference and therefore, neither represent an absolute standard.

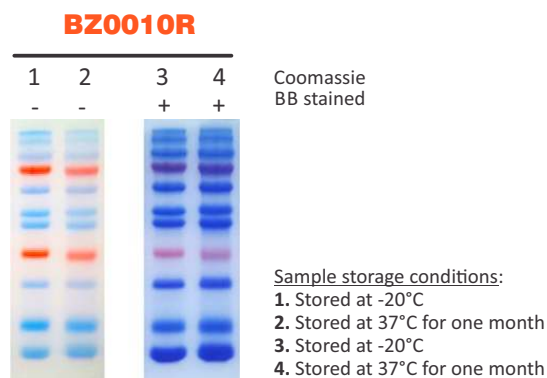


***The evaluation was performed on a Tris-Glycine buffer system
The mobility of prestained proteins can vary in different SDS-PAGE buffer systems.*

Storage Stability Assay:

We fully understand that storage stability is very important for bulk purchasers. Bio Basic prestained protein ladders have excellent stability and can be stored at frozen for long term. For storage stability test, BZ0010R was stored at -20°C and 37°C, respectively, for one month and resolved on 12.5% Laemmli SDS-PAGE gel. Compared with storage in -20°C, BZ0010R only slightly faded (lane 1&2) and little protein degradation occurred (lane 3&4) after one-month storage at 37°C. This result clearly showed that Bio Basic prestained ladder is highly stable even in such harsh condition.

12.5% Laemmli SDS-PAGE Gel



Shipment and storage:

Products are shipped on ice pack and should be store frozen upon receipt. Occasional thawing partly during shipping will not affect the quality and performance because our protein ladders are substantially stable in ambient temperature. 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 as above or at -20°C for one year.



PRODUCTS ARE INTENDED FOR BASIC SCIENTIFIC RESEARCH ONLY.
NOT INTENDED FOR HUMAN OR ANIMAL USE.