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CERTIFICATE OF ANALYSIS

Spectra™ Multicolor Broad Range Protein Ladder

#SM1841 2x250 µl

(for 50 mini gel applications 10 µl per well or
25 large gel applications 20 µl per well)

Lot: **Expiry Date:**

Store at -20°C

In total 2 vials.

ISO 9001 ISO 14001
www.fermentas.com

Description

The Spectra™ Multicolor Broad Range Protein Ladder is a mixture of 10 recombinant, highly purified proteins with apparent molecular weights of 10 to 260 kDa. The proteins are individually prestained using four different dyes.
The Spectra™ Multicolor Broad Range Protein Ladder is ready-to-use: no heating, further dilution or addition of a reducing agent is required before use.

Storage Buffer

62.5 mM Tris-H_3PO_4 (pH 7.5 at 25°C), 1 mM EDTA, 2% (w/v) SDS, 10 mM DTT, 1 mM NaN_3 and 33% (v/v) glycerol.

Applications (1-4)

- Monitoring of protein migration during SDS-PAGE (1).
- Verifying Western transfer efficiency (2-4).
- Approximate sizing of proteins on SDS-polyacrylamide gels and Western blots.

Recommendations for Loading

❶ Thaw the ladder at room temperature for a few minutes to dissolve precipitated solids. **Do not boil!**

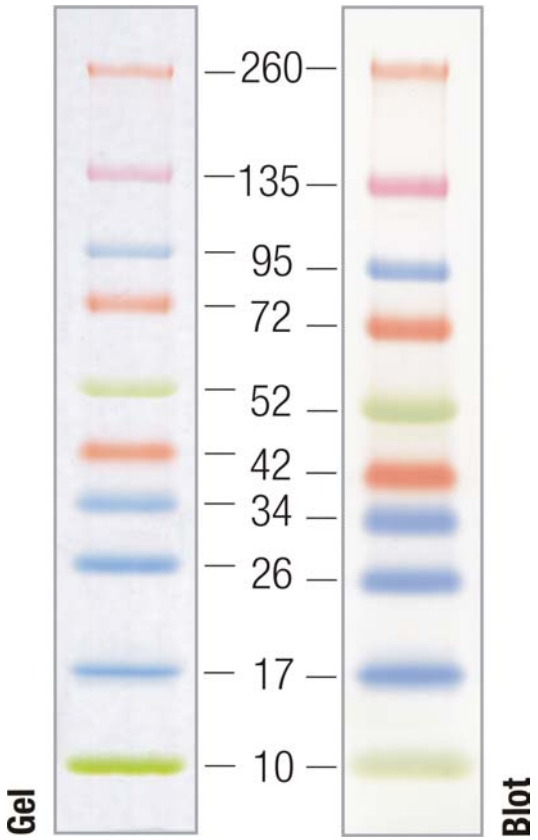
❷ Mix gently, but thoroughly, to ensure that the solution is homogeneous.

❸ Load the following volumes of the ladder on an SDS-polyacrylamide gel:
– 10 µl per well for mini gel,
– 20 µl per well for large gel.
Use the same volumes for Western blotting.

Important Notes

- In 8 or 10% gels low molecular weight proteins may migrate with the dye front.
- Longer transfer times or higher transfer voltages may be required for Western blotting of large (>100 kDa) proteins.
- For precise protein molecular weight determination use the PageRuler™ Unstained Protein Ladder, #SM0661.

Lot specific calculated apparent MW, kDa



4-20% Tris-glycine SDS-PAGE

QUALITY CONTROL

10 µl of Spectra™ Multicolor Broad Range Protein Ladder resolves 10 individual bands in SDS-PAGE (Tris-glycine buffer) and after Western blotting onto PVDF membrane.

Quality authorized by: Jurgita Zilinskiene

(continued on back page)

References

1. Laemmli, U.K., Cleavage of structural proteins during the assembly of the head of bacteriophage T4, Nature, 227, 680-685, 1970.
2. Burnette, W.N., "Western blotting": electrophoretic transfer of proteins from sodium dodecyl sulfate – polyacrylamide gels to unmodified nitrocellulose and radiographic detection with antibody and radioiodinated protein A, Anal. Biochem., 112 (2), 195-203, 1981.
3. Towbin, H., et al., Electrophoretic transfer of proteins from polyacrylamide gels to nitrocellulose sheets: procedure and some applications, Proc. Natl. Acad. Sci. USA, 76, 4350-4354, 1979.
4. Kurien, B.T. and Scofield, R.H., Protein blotting: a review, J. lmm. Meth., 274, 1-15, 2003.

This product is manufactured under the license for ***Strep*-tag**® technology covered by US patents Nos. 5,506,121, 6,103,493 and foreign counterparts.

Related Products

• DualColor™ Protein Loading Buffer Pack	#R1011
• Protein Loading Buffer Pack	#R0891
• PageRuler™ Unstained Protein Ladder	#SM0661
• PageRuler™ Prestained Protein Ladder	#SM0671
• PageRuler™ Plus Prestained Protein Ladder	#SM1811
• PageSilver™ Silver Staining Kit	#K0681
• PageBlue™ Protein Staining Solution	#R0571
• 10X Tris-glycine-SDS Buffer	#B46
• 10X Tris-tricine-SDS Buffer	#B48
• DTT	#R0861
• ProteoJET™ Mammalian Cell Lysis Reagent	#K0301
• ProteoJET™ Cytoplasmic and Nuclear Protein Extraction Kit	#K0311
• Bradford Reagent, ready-to-use	#R1271
• Bovine Serum Albumin Standard Set, ready-to-use	#R1281
• Bovine Gamma Globulin Standard Set, ready-to-use	#R1291

PRODUCT USE LIMITATION.

This product is developed, designed and sold exclusively *for research purposes and in vitro use only*. The product was not tested for use in diagnostics or for drug development, nor is it suitable for administration to humans or animals.

Please refer to www.fermentas.com for Material Safety Data Sheet of the product.

(2) Revised 02.04.2008