

Spectra™ Multicolor Broad Range Protein Ladder

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26634 26623

Number	Description
26634	Spectra Multicolor Broad Range Protein Ladder, 2 × 250µL
26623	Spectra Multicolor Broad Range Protein Ladder, 10 × 250µL

Buffer: 62.5mM Tris•H₃PO₄ (pH 7.5 at 25°C), 1mM EDTA, 2% (w/v) SDS, 10mM DTT, 1mM NaN₃ and 33% (v/v) glycerol.

Storage: Upon receipt store at -20°C. Product is shipped with an ice pack.

Introduction

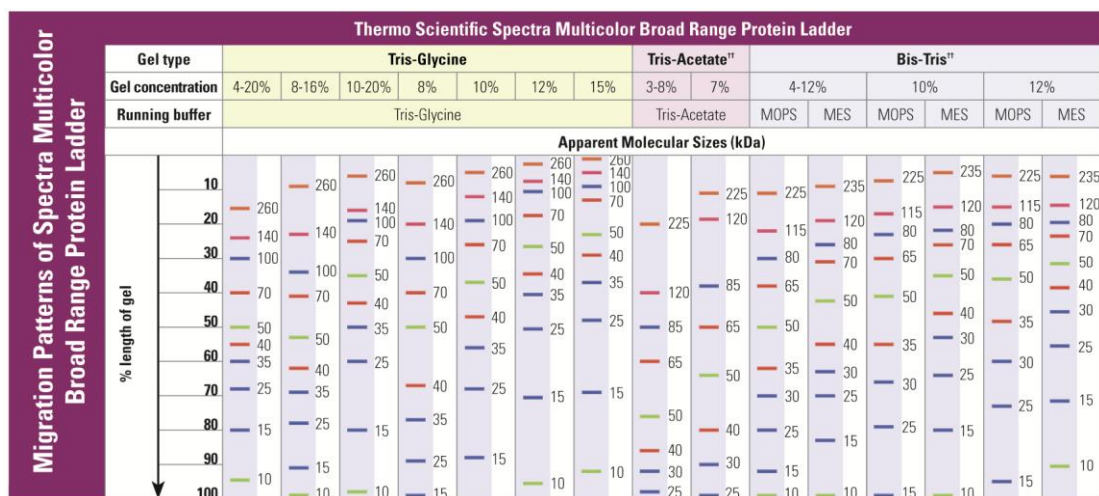
The Thermo Scientific Spectra Multicolor Broad Range Protein Ladders are a prestained mixture of 10 recombinant proteins ranging from 10kDa to 260kDa. Four different chromophores are bound to the proteins, producing a brightly colored ladder in an easy-to-remember pattern (see website for images). The protein ladder is conveniently packaged and ready to use with no heating, diluting or additional reducing agent necessary.

Important Product Information

- Do not boil the protein ladder.
- The molecular weights of the proteins have a lot-to-lot variation of approximately 5%.
- In low-percentage gels (< 10%), low-molecular weight proteins may migrate with the dye front.
- The large proteins (> 100kDa) in the ladder may require longer transfer times or higher transfer voltages for Western blotting.
- The mobility of prestained proteins may vary in different SDS-PAGE buffer systems; however, they are suitable for approximate molecular weight determination when calibrated against unstained standards in the same system. See website for migration patterns in different electrophoresis conditions.

Procedure for Use in Polyacrylamide Gel Electrophoresis

1. Thaw the ladder at room temperature. Do not boil protein ladder.
2. Mix the solution gently and thoroughly to ensure it is homogeneous.
3. Load an appropriate volume of the ladder on the gel.
 - Mini-gel: 10µL per well (0.75-1.0mm thick) or 20µL per well (1.5mm thick)
 - Midi gel: 20µL per well (0.75-1.0mm thick) or 40µL per well (1.5mm thick)
4. Return the unused protein ladder to -20°C for up to one year or 4°C for up to three months.



Related Products

Please see the catalog or website for a complete listing of protein gels and Western blotting products.

- 26614 **PageRuler™ Unstained Protein Ladder, 2 × 250µL**
- 26616 **PageRuler Prestained Protein Ladder, 2 × 250µL**
- 26619 **PageRuler Plus Prestained Protein Ladder, 2 × 250µL**
- 26630 **PageRuler Broad Range Unstained Protein Ladder, 2 × 250µL**
- 26632 **PageRuler Low Range Unstained Protein Ladder, 2 × 250µL**
- 26625 **Spectra Multicolor High Range Protein Ladder, 2 × 250µL**
- 26628 **Spectra Multicolor Low Range Protein Ladder, 250µL**
- LC5615 **iBright™ Prestained Protein Ladder**
- XP04200BOX **Novex™ Tris-Glycine protein gels** (see thermofisher.com/proteingels for a complete listing)
- NW04120BOX **Bolt™ Bis-Tris Plus protein gels** (see thermofisher.com/proteingels for a complete listing)
- 24615 **Imperial™ Protein Stain, 1L**
- LC6060 **SimplyBlue™ SafeStain**

General References

- Alegria-Schaffer, A., *et al.* (2009). Performing and optimizing Western blots with an emphasis on chemiluminescent detection. *Methods Enzymol* **463**:573-99.
- Burnette, W.N. (1981). "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.
- Kurien, B.T. and Scofield, R.H. (2003). Protein blotting: a review. *J Imm Meth* **274**:1-15.
- Laemmli, U.K. (1970). Cleavage of structural proteins during the assembly of the head of bacteriophage T4. *Nature* **227**:680-5.
- Towbin, H., *et al.* (1979). Electrophoretic transfer of proteins from polyacrylamide gels to nitrocellulose sheets: procedure and some applications. *Proc Natl Acad Sci USA* **76**:4350-4.

This product ("Product") is warranted to operate or perform substantially in conformance with published Product specifications in effect at the time of sale, as set forth in the Product documentation, specifications and/or accompanying package inserts ("Documentation") and to be free from defects in material and workmanship. Unless otherwise expressly authorized in writing, Products are supplied for research use only. No claim of suitability for use in applications regulated by FDA is made. The warranty provided herein is valid only when used by properly trained individuals. Unless otherwise stated in the Documentation, this warranty is limited to one year from date of shipment when the Product is subjected to normal, proper and intended usage. This warranty does not extend to anyone other than the original purchaser of the Product ("Buyer").

No other warranties, express or implied, are granted, including without limitation, implied warranties of merchantability, fitness for any particular purpose, or non infringement. Buyer's exclusive remedy for non-conforming Products during the warranty period is limited to replacement of or refund for the non-conforming Product(s).

There is no obligation to replace Products as the result of (i) accident, disaster or event of force majeure, (ii) misuse, fault or negligence of or by Buyer, (iii) use of the Products in a manner for which they were not designed, or (iv) improper storage and handling of the Products.

Current product instructions are available at thermofisher.com. For a faxed copy, call 800-874-3723 or contact your local distributor.

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