INSTRUCTIONS



SpectraTM Multicolor High Range Protein Ladder

26625 26626 2356.0

Number Description

26625 Spectra Multicolor High Range Protein Ladder, 2 × 250μL
26626 Spectra Multicolor High Range Protein Ladder, 50μL

Storage 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 High Range Protein Ladder is a prestained mixture of eight recombinant proteins ranging from 40K to 300K. Three different chromophores are bound to the proteins, producing a brightly colored ladder specifically designed for large-protein analysis (see website for product 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.
- Store the protein ladder for up to three months at 4°C or for one year at -20°C.
- The molecular weights of the proteins in the ladder have a lot-to-lot variation of approximately 5%.
- The large proteins (> 100K) in the protein ladder may require longer transfer times or higher transfer voltages for Western blotting.
- The mobility of proteins in the ladder can 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 protein ladder at room temperature. Do not boil the protein ladder.
- 2. Mix the protein ladder gently and thoroughly to ensure the solution is homogeneous.
- 3. Load an appropriate volume of the protein ladder onto the gel.
 - Mini-gel: 10μL per well (0.75-1.0mm thick) or 20μL per well (1.5mm thick)
 - Large 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 Thermo Scientific Products

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

26610	Unstained Protein Molecular Weight Marker , 2 × 1mL
26612	Prestained Protein Molecular Weight Marker, $2 \times 250 \mu L$
26614	PageRuler TM Unstained Protein Ladder, $2 \times 250 \mu L$
26616	PageRuler Prestained Protein Ladder, $2 \times 250 \mu L$
26619	PageRuler Plus Prestained Protein Ladder, $2 \times 250 \mu L$
26630	PageRuler Broad Range Unstained Protein Ladder, $2\times250\mu L$
26632	PageRuler Low Range Unstained Protein Ladder, $2\times250\mu L$
26634	Spectra Multicolor Broad Range Protein Ladder, $2\times250\mu L$
26628	Spectra Multicolor Low Range Protein Ladder, $250\mu L$
84785	$\textbf{SuperSignal}^{\texttt{@}} \textbf{ Enhanced Molecular Weight Protein Standards, } 250 \mu L$
84786	SuperSignal Enhanced Molecular Weight Protein Standards, $250\mu L$
25244	Precise™ Protein Gels, 4-20%, 15 well
84713	Pierce® Protein Gels, 4-20%, 12 well
24615	Imperial TM Protein Stain, 1L
24594	GelCode™ Blue Safe Protein Stain, 1L

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.

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