

## ProSieve® Unstained Protein Marker II, 10 kDa – 200 kDa

### Instructions for Use

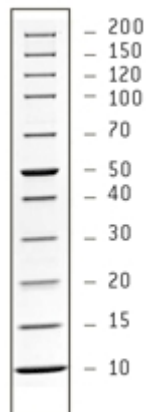
#### Introduction

ProSieve® Unstained Protein Marker II is a mixture of 11 recombinant, highly purified proteins designed for sharp and accurate sizing of proteins in SDS-polyacrylamide gel electrophoresis, as well as on PVDF, nylon and nitrocellulose membranes. The proteins resolve into clearly identifiable sharp bands from 10 kDa to 200 kDa when analyzed by SDS-PAGE and stained with Coomassie Blue<sup>1</sup>.

Exact masses of the proteins in this marker are: 10, 15, 20, 30, 40, 50, 70, 100, 120, 150, and 200 kDa. The 50 kDa band is higher intensity for easier identification. Each protein contains an integral Strep-tag® II sequence (WSHPQFEK) and may be detected on Western blots using Strep-Tactin®-AP conjugate or antibody against Strep-tag® II<sup>2,3</sup>.

ProSieve® Unstained Protein Marker II is ideal for precise molecular weight determination of polypeptides in denaturing polyacrylamide gels and Western blots<sup>1,4</sup>.

ProSieve® Unstained Protein Marker II  
10 kDa – 200 kDa



#### Contents

Cat. No. 00193839

ProSieve® Unstained Protein Marker II, 2 x 250 µl  
(100 minigel applications @ 5 µl per well or 50 large gel applications @ 10 µl per well)

#### Storage Buffer

62.5 mM Tris-H<sub>3</sub>PO<sub>4</sub> (pH 7.5), 1 mM EDTA, 2% SDS, 0.1 M DTT, 1 mM NaN<sub>3</sub>, 0.01% bromophenol blue and 33% glycerol.

Store at -20°C for 2 years from date of manufacture

#### Protocol

1. Thaw Ladder at room temperature or heat at 37-40°C for a few minutes to dissolve precipitated solids. DO NOT BOIL!
2. Mix gently, but thoroughly to ensure the solution is homogeneous.
3. Load the following volumes of the marker on an SDS-polyacrylamide gel.

	For Gel Analysis	For Blot Analysis
Minigel	5 µl	3 µl
Large gel	10 µl	6 µl

4. After the run is complete, stain the gel or perform Western transfer procedure as desired.

#### NOTES

- The 50 kDa and 10 kDa protein bands are of greater intensity and serve as a reference.
- Low molecular weight proteins may migrate with the dye front on low concentration gels (e.g. 7.5% & 10%).
- Loading volumes are indicated for gels with a thickness of 1 mm. If thicker gels are used, the loading volume should be increased.
- When Western blots are performed, ProSieve® QuadColor™ Protein Marker can be used for monitoring of transfer efficiency.

- Strep-tag<sup>®</sup> II Sequence Detection Systems are not supplied by Lonza. Detection systems are available from IBA (see [www.iba-go.de](http://www.iba-go.de)).
- The 200 kDa band has lower intensity than the other bands when detected on Western blots using Strep-Tactin<sup>®</sup>-AP conjugate.
- ProSieve<sup>®</sup> Unstained Protein Marker II is optimized for use with ProSieve<sup>®</sup> Blue Protein Staining Solution or Coomassie<sup>®</sup> Brilliant Blue R-250 Stain.
- For silver staining the amount of ProSieve<sup>®</sup> Unstained Protein Marker II applied might be decreased up to 10 times.

## References

1. Laemmli, U.K. (1970). Cleavage of structural proteins during the assembly of the head of bacteriophage T4. *Nature*. 227: 680-685.
2. Schmidt, T. G. M. & Skerra, A (1993). The random peptide library-assisted engineering of a C-terminal affinity peptide, useful for the detection and purification of a functional Ig Fv fragment. *Prot. Engineering*. 6: 109-122.
3. Tsiotis, G., Haase, W., Engel, A. & Michel, H. (1995). Isolation and structural characterization of trimeric cyanobacterial photosystem I complex with the help of recombinant antibody fragments. *Eur. J. Biochem*. 231: 823-830.
4. Current Protocols in Molecular Biology, vol. 1 (Ausubel, FM., et al., ed), John Wiley & Sons, Inc., Brooklyn, New York 10.2A, 10.6.-10.8, 1994-2002.

## Product Safety

For details regarding product safety, see Material Safety Data Sheet (MSDS); call +1 (800) 638-8174 for extra copies of the MSDS. Emergency after hours, call collect +1 (303) 595-9048.

Manufactured for Lonza Rockland, Inc.

### **For Research Use Only. Not For Use In Diagnostic Procedures.**

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

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