Lonza Rockland, Inc.
www.lonza.com
scientific.support@lonza.com
Scientific Support: 800-521-0390
Document # 00522218-1009-00
Rockland, ME 04841 USA

ProSieve® Blue Protein Staining Solution

Instructions for Use

Introduction

ProSieve® Blue Protein Staining Solution is a ready-to-use solution for fast and sensitive staining of proteins separated in polyacrylamide gels or PVDF membranes. ProSieve® Blue Protein Staining Solution is based on the Coomassie Brilliant Blue G-250 dye.

ProSieve® Blue dye forms colloidal particles allowing proteins to be preferentially stained eliminating the need for laborious, expensive and hazardous gel de-staining procedures. Proteins are stained to an endpoint, therefore over-staining does not occur, even after overnight staining.

The linear dynamic range of ProSieve® Blue extends over two orders of magnitude (5 ng-500 ng) and is about 10 times more sensitive than traditional Coomassie Brilliant Blue R-250. ProSieve® Blue Protein Staining Solution does not contain methanol or acetic acid and can be reused up to three times without any loss in sensitivity.

Contents

Cat. No. 00193862
ProSieve® Blue Stain, 1 L (for up to 150 minigels)

Store at 4°C - 26°C

Staining Protocol for minigels

Microwave Method (40 min)

1. In a dish, add 100 ml of dH_2O to the gel, and microwave on high power for 1 min (do not cover).
2. Agitate gently. (4 min)
3. Discard the wash.
4. Repeat steps 1-3 (3 times total)
5. Add ~20 ml (completely cover the gel) of ProSieve® Blue Stain.
6. Microwave for up to 30 seconds on high power (do not boil).
7. Stain with gentle agitation. (20 min)
8. Wash the gel in dH_2O. (5 min)

Standard Method (95 min)

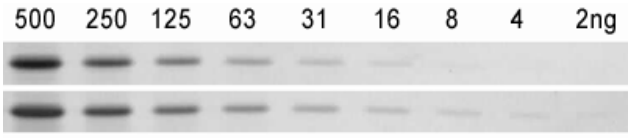
1. Wash the gel in 100 ml of dH_2O in a dish. (3 x 10 min)
2. Stain with ~20 ml (completely cover the gel) of ProSieve® Blue Stain with gentle agitation. (60 min to overnight)
3. Wash the gel in dH_2O. (5 min)

Staining Protocol for PVDF Membranes

1. Completely dry the PVDF membrane.
2. In a dish, add ProSieve® Blue Stain to cover the PVDF membrane. Agitate gently. (2 min)
3. Wash with 30% ethanol with gentle agitation. (5 min)
4. To remove the stain completely, wash the membrane with the mixture of 30% acetonitrile and 20% ethanol. (5 min)

NOTES

- Staining volume will vary with gel size. Volume will need to be adjusted for multiple gels. Completely cover the gel(s) when staining.
- Initial washings (i.e. step 1) in the standard protocol is dedicated to removing of SDS from the gel as SDS interferes with staining. Since native gels do not contain SDS, this step is omitted.
- Fixing proteins can increase sensitivity by using 12% TCA or, 25% isopropanol and 10% acetic acid for 15 min.
- Staining sensitivity using the Microwave or Standard protocol is comparable.
- ProSieve® Blue Stain can be reused up to three times without noticeable decrease in sensitivity.
- Background may be further minimized by extending final wash time.



Comparison of detection sensitivity between standard colloidal stain (upper bands) and ProSieve® Blue Protein Staining Solution (lower bands)

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.