

## User Guide

# ReadyBlue™ Protein Gel Stain

RSB-1L, RSB-30ML

### Product Description

ReadyBlue™ Protein Gel Stain is a rapid and sensitive colloidal Coomassie® stain for polyacrylamide gels. The stain is provided as a ready-to-use solution, allowing for a fast and simplified protocol. No prior fixing step is necessary. For convenience, ReadyBlue™ gel stain can be stored at room temperature.

### Precautions and Disclaimer

This product is for Research use only. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

### Storage and Stability

ReadyBlue™ Protein Gel Stain features a shelf-life of up to 18 months from the date of manufacture when stored at 2–8 °C or room temperature and protected from light.

Stain may be reused up to three times, however there may be a reduction in sensitivity with each subsequent use because of loss of dye. If the stain is reused, then it is the responsibility of the user to confirm proper storage conditions and verify performance.

### Methods

#### Standard Protocol

1. Pour stain into a clean, detergent-free container. Use approximately 25 ml for mini gels (e.g. 8 X 10 cm gels). For larger gels use a volume of staining solution equal to approximately five times the gel volume. Using too little staining solution can reduce sensitivity.
2. Place gel in staining solution and incubate with gentle agitation on a platform shaker for a minimum of one hour. For higher intensity, stain for 1-2 hours. Gels will not over-stain if left in staining solution overnight.
3. Remove the stain and wash gels in deionized water to remove any background staining and for gel storage.  
**NOTE:** A minimum one-hour full stain is recommended before storing the gel in water.

#### Microwave Gel Staining Protocol (optional)

Adding a brief microwave step can reduce decrease staining time and allow for a quick evaluation of staining efficacy. For maximum sensitivity, use the standard protocol.

1. Immerse the gel in ReadyBlue™ Protein Gel Stain, in a clean, detergent-free, microwave-safe container and place in microwave for a maximum 60 seconds at full power.

2. Remove the container from the microwave. Wash gels for 120 seconds in deionized water at room temperature to remove any background staining. *Do not microwave gel to remove background.*

**NOTE:** A minimum one-hour full stain is recommended before storing the gel in water.

#### Protocol for Destaining Bands Prior to Mass Spectrometry Analysis

1. Use standard gel staining protocol.
2. Excise the protein band of interest and place in a clean Microfuge® tube.
3. Add 1 mL of 30% ethanol or acetone.
4. Incubate for 20 minutes (Increasing temperature to 60 °C – 70 °C decreases time needed for destaining).
5. Decant supernatant and repeat step 3 and 4 a minimum of 3 times or until the gel fragment is clear
6. Continue with required mass spectrometer sample preparation steps.

### Notice

We provide information and advice to our customers on application technologies and regulatory matters to the best of our knowledge and ability, but without obligation or liability. Existing laws and regulations are to be observed in all cases by our customers. This also applies in respect to any rights of third parties. Our information and advice do not relieve our customers of their own responsibility for checking the suitability of our products for the envisaged purpose.

The information in this document is subject to change without notice and should not be construed as a commitment by the manufacturing or selling entity, or an affiliate. We assume no responsibility for any errors that may appear in this document.

### Contact Information

For the location of the office nearest you, go to [www.sigmaaldrich.com/offices](http://www.sigmaaldrich.com/offices).

### Technical Assistance

Visit the tech service page on our web site at [www.sigmaaldrich.com/techservice](http://www.sigmaaldrich.com/techservice).

### Standard Warranty

The applicable warranty for the products listed in this publication may be found at [www.sigmaaldrich.com/terms](http://www.sigmaaldrich.com/terms).

MilliporeSigma, ReadyBlue, and Sigma-Aldrich are trademarks of Merck KGaA, Darmstadt, Germany or its affiliates. All other trademarks are the property of their respective owners. Detailed information on trademarks is available via publicly accessible resources.  
© 2019 Merck KGaA, Darmstadt, Germany and/or its affiliates. All Rights Reserved.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the U.S. and Canada.

**MILLIPORE  
SIGMA**