



BioBlue™ Protein Gel Stain

©ITSIBIO2011-2015: Validated BioLab Procedures

IMPORTANT: BioBlue™ (Cat No. A0025) is a modified colloidal Coomassie G-250 based protein gel stain specifically formulated for consistent and reproducible visualization of total proteins after polyacrylamide gel electrophoresis. BioBlue™ preferentially binds to proteins forming dark blue and distinct protein bands (Fig 1). BioBlue™ is sensitive and reveals many more low-abundant protein bands compared to competing Coomassie R-250 and G-250 based stains because of the decreased staining of the gel. The stained proteins can be easily visualized and picked/cut from the gel without the methanol or acetic acid destaining step, making the product easy/fast-to-use and environmentally friendly. BioBlue™ is fully compatible with mass spectrometry and western analysis. Exercise caution when working with BioBlue™ and protect your protein sample from contamination by wearing appropriate protective apparel. Work in a clean environment to prevent the introduction of keratin, which is common airborne contaminant.

Read the procedure completely and assemble all materials needed before starting.

MATERIALS PROVIDED IN THIS KIT:

Item	Size	Catalog #	Storage
BioBlue™ Gel Stain	500 ml	A-0025-500	4°C
Procedure			

Materials required but NOT supplied:

1. Gel tray for staining.
2. Shaker.
3. Milli-Q water.

PROCEDURE:

1. After electrophoresis rinse the gel in Milli-Q water for 5 minutes. After the rinse discard the water.
2. If the gel will be stored and not stained immediately it should be fixed for at least 30 minutes. The recipe for a fixing solution is given below.
3. Add enough BioBlue™ to cover the gel completely. Before using the BioBlue™, swirl the bottle for 30 seconds to mix. **Do not shake the bottle.**
4. Gently agitate the gel on a shaker. For best results, especially to obtain uniform staining of bands, use a slow speed so the BioBlue™ slowly washes over the gel.
5. Stain for about 30 min. If total protein content is low (e.g. <0.05 µg/µl) or darker bands are desired the staining time can be extended.
6. After about 1 hour, or when the desired level of staining is achieved, discard the stain and do a quick rinse of the gel in Milli-Q water.
7. Destain the gel by adding enough Milli-Q water to cover gel, and gently agitate the gel for 30 minutes. The gel is now ready to be imaged.
8. If less background is required, repeat step 7.
9. For faster destaining Gel Fix (recipe provided) may be used instead of water.

Gel Fix solution recipe (in milli-Q water):

- 10% Methanol
- 7% Acetic Acid

STORAGE & SHELF LIFE:

BioBlue is shipped at room temperature. Store BioBlue™ gel stain at 4°C. Product is guaranteed for 1 year from date of manufacture.

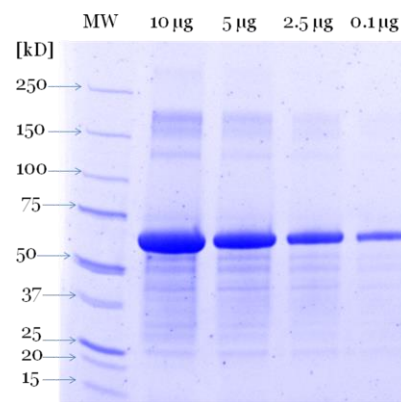


Fig 1: Representative SDS-PAGE (4–15% Gradient Gel) showing the intensity of 10µg to 0.1µg of Bovine Serum Albumin (BSA) after staining for 60 min with BioBlue™. MW is molecular weight marker.

CONDITIONS FOR USE OF THIS PROCEDURE:

This product is for research use only. This VBP is the intellectual property of ITSI-Biosciences, LLC. Only reagents provided by ITSI-Biosciences, LLC may be used with this product because of compatibility with many downstream steps. Considering that many factors can cause experiments to fail, ITSI-Biosciences, LLC cannot guarantee that the use of this VBP will lead to a successful experiment. In no event shall ITSI-Biosciences, LLC or its distributors be held liable for loss of samples, failure of experiments or any other damage or injury associated with the improper use of this procedure or associated materials and reagents.

GENERAL SAFETY INFORMATION:

Consider all chemicals as potentially hazardous. Only trained laboratory personnel familiar with good laboratory practice should handle this product. Protective clothing should be worn. Use caution to avoid contact with skin and eyes. If contact should occur, wash immediately with clean water and follow the established guidelines/procedures in your laboratory. **WARNING: Intended for research use only, not for use in human, therapeutic or diagnostic applications. The end user is responsible for all local, state and federal regulations associated with the use and disposal of laboratory reagents.**

Distributed Exclusively By:

ITSI-Biosciences, LLC

633 Napoleon Street,
Johnstown, PA 15901, USA.
Attention: Product Manager

Phone: 1-814-262-7331 Fax: 1814-262-7334

Website: www.itsibio.com Email: itsi@itsibio.com