

Gel-FAST™ 20 Minutes Gel Staining/Destaining Kit
(Catalog #K901-40; Store kit at room temperature)

I. Introduction:

SDS-PAGE is one of the most powerful and commonly used techniques in molecular biology. However, traditional protein gel staining and destaining methods take several hours to finish and leaves a high blue background on the gel reducing the detection sensitivity. BioVision's **Gel-FAST™ 20 Minutes Gel Staining/Destaining Kit** provides a fast and sensitive method for SDS-PAGE gel staining and destaining. The procedure requires only 5 min for gel staining and 15 min for destaining. A total of 20 min allow visualization of as little as 5 ng of protein on a water-clear background. The kit contains sufficient solutions to stain and destain up to 40 pieces of protein mini gels.

II. Kit Contents:

Component	K901-40	Part Number
2X Solution A*	500* ml	K901-40-1
6X Solution B	500 ml	K901-40-2

*Add 250 ml of isopropanol (not provided) before use to generate the 500 ml of 2X Solution A.

III. Preparation of 1X Staining and Destaining Solutions:

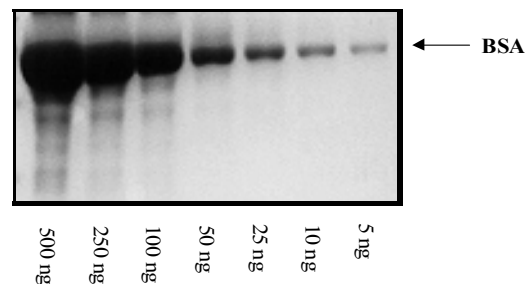
The 2X Solution A and 6X Solution B should be diluted with water for 2 and 6 times, respectively, to produce 1X Solution A and 1X Solution B.

IV. Gel Staining and Destaining Procedure:

1. Run SDS-PAGE using standard technique.
2. Place the gel in a microwavable staining tray containing 50 - 100 ml of the 1X Solution A.
3. Heat the tray in a microwave to the boiling point (1 - 1.5 min).
4. Gently shake the gel for 3 minutes at room temperature, discard the solution.
5. Rinse the gel with tap water, discard the water solution immediately.
6. Add 50 - 100 ml of 1X Solution B and microwave to the boiling point (1 - 1.5 min).
7. Gently shake the gel for 3 min, discard the solution.
8. Rinse the gel with water and discard the water solution immediately.
9. Repeat steps 6 - 8 two times.
(As little as 5 ng of protein can be observed at this point against a water-clear background)

V. Storage and Stability:

- Store Solution A and Solution B at room temperature.
- Both solutions are stable for at least 1 year.



VI. Related Buffers and Reagents

- 3X SDS-PAGE Loading Buffer
- SDS Solution (10 % in water)
- Triton X-100 Solution (10 % in H₂O)
- Sodium Chloride Solution (NaCl, 5 M)
- EDTA Solution (0.5 M, pH 8.0)
- Magnesium Chloride Solution (MgCl₂, 1 M)
- Orange G DNA Loading Buffer (10X)
- Potassium Chloride Solution (KCl, 1 M)
- Sodium Acetate (NaAc, 3 M, pH 5.2)
- TAE (50X) & TBE (10X)
- Tris-HCl (1 M, pH 6.8) & Tris-HCl (1.5 M, pH 8.8)
- Tween 20 Solution (10 %)

VII. Other Key Products Offered:

- Apoptosis Detection Kits and Antibodies
- Cell Proliferation & Cytotoxicity Assays
- Cell Fractionation kits
- cAMP and cGMP Assays, Kinase, beta-Secretase Assay kits
- Glutathione, HDAC, HAT, DNA Damage and Nitric Oxide Assay Kits
- Adiponectin, CETP, PLTP, Cholesterol Assay kits and Reagents
- Growth Factors, Cytokines, & Chemokines
- Molecular Biology Kits and Reagents
- Monoclonal and Polyclonal Antibodies

FOR RESEARCH USE ONLY! Not to be used in humans.