SARPStain Protein Dye

(250 small gel equivalent)

#GPS 101 **60ml**

Store at Room Temperature

Available Pack Size

Catalogue Number	Pack Size	☑
GPS 101	60 ml	✓
GPS 102	150 ml	

Description

SARPStain Protein Dye is a ready-to-use, sensitive, fluorescent stain for detecting proteins separated by polyacrylamide gel electrophoresis (PAGE). While specially formulated for analysis of proteins in 2D polyacrylamide gels, SARPStain Protein Dye protein gel stain also stains 1D gel. The stain does not interfere with subsequent analysis of proteins in Western Blotting and Edman-based sequencing or MALDI.

Procedure

The basic protocol is optimized for standard 1 mm thick, 8 cm × 8 cm SDS-PAGE Tris-Glycine minigels. Larger or thicker gels require additional volumes of reagents and/or longer incubation times. SARP GEL staining can be easily used for non-denaturing gels also.

1. After electrophoresis, place the gel into a clean **glass container** (tested with Borosil glass) with 50 mL of freshly prepared *Sensitizing* solution (20% Methanol, 0.2% Tween-20, 28.6 mM beta Mercaptoethanol, 200 µl SARP Stain) and gently agitate on an orbital shaker or on a rocker for 10 minutes. Mild heating using microwave (~10-15 sec.) to reach the temperature near 40-45°C can lower the background stain and increase sensitivity. Please place a lid over the container before microwave.

2. Discard the solution and Repeat the same procedure with the same freshly prepared *Sensitizing* solution.

Note: To get better sensitivity these steps should be done properly. In some instances sensitization in triplicate (10min X 3) can give better results. Agitation should be done within 40-60 rpm range. Use of good quality methanol is highly essential for proper visualization of bands. Use ultrapure water for solution preparation.

3. Add 50 mL of staining solution (20% Methanol, 28.6 mM β-ME, 200 µl SARP Stain in 50 ML water) discarding sensitizing solution. Agitate on an orbital shaker or rocker for 10 mins. Heating using microwave for 10-15 sec give higher sensitivity.

4. Documented the gel following staining with trans-illuminator or gel documentation system (e,g BioRad XRS+ chemidoc over UV- transiluminator).Take picture in Etbr or SAPRO Ruby mode. Adjust the exposure time to get better picture. To get rid of nonspecific dotted spots, rinsed the gel before documentation.

Note: Protein band will be appears bright band against dark background. 200-100 ng BSA protein band can be visualized after full operations. Proteins stained with SARPstain Protein dye can be visualized using a UV trans-illuminator. Integrating capability of the signal by the instrument though set the final visibility limit. The use of a photographic camera or CCD camera with the appropriate filters is recommended to obtain the greatest sensitivity. Before imaging rinse the gel in ultrapure water to prevent possible corrosive damage to the imager. Remove the gel promptly after imaging.

Quick Guide: (For One small Gel)

Steps	Reagents	Procedure
Sensitization	20% Methanol and 0.2% Tween-20,28.6 mM β-ME, 200 µl SARP stain in Milli Q water	50 ML,5-10 min.
		50 ML,5-10 min.
Staining	20% Methanol, , 28.6 mM β-ME ,200 µl SARP stain in MilliQ water	50 ML,5- 10 min.

Documentation: