## **Product** Data Sheet

## Sulforhodamine G

**Cat. No.:** HY-D1674 **CAS No.:** 5873-16-5

Molecular Formula:  $C_{25}H_{25}N_2Na_2O_7S_2^+$ 

Molecular Weight: 575.58

Target: Fluorescent Dye

Pathway: Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

ONa

## **BIOLOGICAL ACTIVITY**

Description

Sulforhodamine G is a fluorescent stain with broad dynamic ranges. Sulforhodamine G can be used for the research of protein stains<sup>[1]</sup>.

In Vitro

Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs).

Labeling of fluorescent internal protein:

- A. Prepared of protein samples:
- 1. Protein samples to be analyzed are spiked with 0.1% of the total protein load of ALIS647 (ALIS internal standard) prior.
- 2. Protein sample is separated with 2-DE in the dark.
- B. Purify Sulforhodamine G:
- 1. Sulforhodamine G (60% purity, 10 mg) dissolved in 100 mL of 1% v/v acetic acid to purify by RP chromatography.
- 2. Collect the pool with an absorbance maximum at 528 nm, lyophilized to dryness and stored as a dry powder at 47 M.
- C. Stainning
- 1. staining was performed in polypropylene staining dishes wrapped in aluminum foil to prevent photobleaching of the
- 2. Sulforhodamine G staining is performed overnight in 35% methanol with a four-fold molar excess of dye: protein based on an average protein molecular weight of 50 kDa.
- 3. Following 4×15 min washes in 35% methanol and 2×15 min equilibrations in water.
- ${\bf 4.}\, {\sf Total}\, {\sf protein}\, {\sf and}\, {\sf ALIS}\, {\sf are}\, {\sf visualized}\, {\sf with}\, {\sf a}\, {\sf laser}\, {\sf scanner}\, {\sf using}\, {\sf different}\, {\sf channels}.$
- 5. Protein spots visualized using total protein stain (λex=532 nm) and ALIS (λex=633 nm) are quantified separately using 2-DE software, and statistical analysis.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **REFERENCES**

[1]. Asa M Wheelock, et al. Use of a fluorescent internal protein standard to achieve quantitative two-dimensional gel electrophoresis. Proteomics. 2006 Mar;6(5):1385-98.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$ 

Tel: 609-228-6898 Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA

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