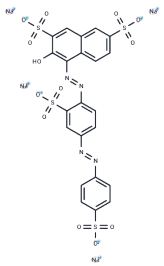
Data Sheet (Cat.No.T23173)

TargetMol

Ponceau S

Chemical Properties



CAS No. : 6226-79-5

Formula: C22H12N4Na4O13S4

Molecular Weight: 760.57

Storage: Keep away from direct sunlight
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Ponceau S (Acid Red 112) is an azo protein dye commonly used as a stain in spot blotting assays for protein quantification.
Targets(IC50)	Others
In vitro	1. Use in Western Blot 1. Material preparation: 1) Ponceau S solution: generally prepared as a 0.1% solution, Ponceau S can be dissolved in water or 1% ethanol. 2) Transfer membrane: usually PVDF or nitrocellulose membrane, on which the protein in the sample is transferred. 3) Decontamination buffer (TBST or other suitable buffer): used to remove excess dye. 2. Steps: 1) Staining: Soak the transferred membrane in Ponceau S solution, usually staining for 5-10 minutes, until the protein band appears obvious red. 2) Washing: Wash the membrane with decontamination buffer to remove excess dye, usually washing several times until the background of the protein band is clearer. 3) Detection: Use a scanner or camera to shoot the stained membrane, observe the position and intensity of the protein band, and perform quantitative analysis. 2. Protein quantitative analysis By comparing the intensity of standard protein bands (such as β-actin, GAPDH, etc.), a preliminary estimate of the protein concentration in unknown samples can be made. The above information is based on published literature. Experimental procedures should be appropriately modified to meet specific research demands.

Solubility Information

Solubility	H2O: 20 mg/mL (26.3 mM),Sonication is recommended. DMSO: 80 mg/mL (105.18 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.3148 mL	6.574 mL	13.148 mL
5 mM	0.263 mL	1.3148 mL	2.6296 mL
10 mM	0.1315 mL	0.6574 mL	1.3148 mL
50 mM	0.0263 mL	0.1315 mL	0.263 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Verzeroli C, et al. A fluorescent Ponceau S-based total protein normalization method for conventional and challenging immunoblot samples. Anal Biochem. 2023 Nov 15;681:115330.
Laftani Y,et al. Theoretical study of Ponceau S oxidation using the electro-Fenton process under optimal operational conditions. RSC Adv. 2023 Nov 2;13(46):32217-32222.
Wang Q,et al. Western blot normalization: Time to choose a proper loading control seriously. Electrophoresis. 2023 May;44(9-10):854-863.