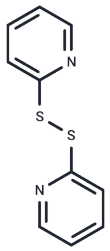
Data Sheet (Cat.No.T19780)

TargetMol

2,2′-Dipyridyl disulfide

Chemical Properties



CAS No. : 2127-03-9

Formula: C10H8N2S2

Molecular Weight: 220.31

Storage: 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	2,2′-Dipyridyl disulfide (Aldrithiol 2) is a useful reagent for the determination of sulfhydryl groups. It acts as a peptide coupling reagent and as an oxidizing agent. 2,2′-Dipyridyl disulfide (Aldrithiol 2) is also used for the activation of glycosides.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: 55 mg/mL (249.65 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 2 mg/mL (9.08 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.5391 mL	22.6953 mL	45.3906 mL
5 mM	0.9078 mL	4.5391 mL	9.0781 mL
10 mM	0.4539 mL	2.2695 mL	4.5391 mL
50 mM	0.0908 mL	0.4539 mL	0.9078 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

Watanabe D, Kanzaki K, Kuratani M,et al. Contribution of impaired myofibril and ryanodine receptor function to prolonged low-frequency force depression after in situ stimulation in rat skeletal muscle. J Muscle Res Cell Motil. 2015 Jun;36(3):275-86.

Miller E, Spadaccia M, Sabado R, et al. Autologous aldrithiol-2-inactivated HIV-1 combined with polyinosinic-polycytidylic acid-poly-L-lysine carboxymethylcellulose as a vaccine platform for therapeutic dendritic cell immunotherapy. Vaccine. 2015 Jan 3;33(2):388-95. doi: 10.1016/j.vaccine.2014.10.054. Epub 2014 Nov 15.

Kanishchev OS, Dolbier WR Jr. Synthesis and characterization of 2-pyridylsulfur pentafluorides. Angew Chem Int Ed Engl. 2015 Jan 2;54(1):280-4. doi: 10.1002/anie.201409990. Epub 2014 Nov 6.

Basak D, Kumar R, Ghosh S. Telechelic Poly(disulfide)s and Related Block Copolymer. Macromol Rapid Commun. 2014 Aug;35(15):1340-4.