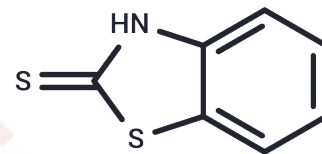


2-Mercaptobenzothiazole

Chemical Properties

CAS No. :	149-30-4
Formula:	C7H5NS2
Molecular Weight:	167.25
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-Mercaptobenzothiazole (Captax) is an organosulfur compound. 2-Mercaptobenzothiazole is used in rubber vulcanization.
Targets(IC50)	Aryl Hydrocarbon Receptor, Endogenous Metabolite

Solubility Information

Solubility	DMSO: 55 mg/mL (328.85 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 (11.96 mM), Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	5.9791 mL	29.8954 mL	59.7907 mL
5 mM	1.1958 mL	5.9791 mL	11.9581 mL
10 mM	0.5979 mL	2.9895 mL	5.9791 mL
50 mM	0.1196 mL	0.5979 mL	1.1958 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

- Jing P, Hou M, Zhao P, Tang X, Wan H. Adsorption of 2-mercaptobenzothiazole from aqueous solution by organo-bentonite. *J Environ Sci (China)*. 2013 Jun 1;25(6):1139-44. PubMed PMID: 24191603.
- Avagyan R, Sadiktsis I, Bergvall C, Westerholm R. Tire tread wear particles in ambient air--a previously unknown source of human exposure to the biocide 2-mercaptobenzothiazole. *Environ Sci Pollut Res Int*. 2014 Oct;21(19):11580-6. doi: 10.1007/s11356-014-3131-1. Epub 2014 Jun 11. PubMed PMID: 25028318.
- Parham H, Pourreza N, Marahel F. Resonance Rayleigh scattering method for determination of 2-mercaptobenzothiazole using gold nanoparticles probe. *Spectrochim Acta A Mol Biomol Spectrosc*. 2015;151:308-14. doi: 10.1016/j.saa.2015.06.108. Epub 2015 Jun 29. PubMed PMID: 26143323.
- Bekanntmachung des Umweltbundesamtes. [A Study of 2-Mercaptobenzothiazole (2-MBT) and HBM values for 2-MBT in the urine of adults and children: Opinion of the "Human Biomonitoring" Commission of the German Federal Environment Agency]. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz*. 2015 Sep;58(9):1027-40. doi: 10.1007/s00103-015-2212-8. German. PubMed PMID: 26293219.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only. Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481