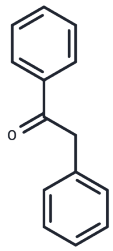
Data Sheet (Cat.No.T20347)

TargetMol

Deoxybenzoin

Chemical Properties



CAS No. : 451-40-1

Formula: C14H12O

Molecular Weight: 196.24

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	Deoxybenzoin (2-Phenylacetophenone) is used to target immune sensors and xanthine oxidase. It is used for the treatment of gout.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: 60 mg/mL (305.75 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 (10.19 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	5.0958 mL	25.479 mL	50.958 mL
5 mM	1.0192 mL	5.0958 mL	10.1916 mL
10 mM	0.5096 mL	2.5479 mL	5.0958 mL
50 mM	0.1019 mL	0.5096 mL	1.0192 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

Huang J, Zhou Z, Zhou M, Miao M, Li H, Hu Q. Development of benzoxazole deoxybenzoin oxime and acyloxylamine derivatives targeting innate immune sensors and xanthine oxidase for treatment of gout. Bioorg Med Chem. 2018 May 1;26(8):1653-1664.

Timofeeva DS, Mayer RJ, Mayer P, Ofial AR, Mayr H. Which Factors Control the Nucleophilic Reactivities of Enamines? Chemistry. 2018 Apr 17;24(22):5901-5910.

Moskvina VS, Shablykina OV, Khilya VP. Reactions of 3-Arylisocoumarins with N-Nucleophiles - A Route to Novel Azaheterocycles. Curr Top Med Chem. 2017;17(29):3199-3212.

Srinivasan B, Rodrigues JV, Tonddast-Navaei S, Skolnick J. Rational Design of Novel Allosteric Dihydrofolate Reductase Inhibitors Showing Antibacterial Effects on Drug-Resistant Escherichia coli Escape Variants. ACS Chem Biol. 2017 Jul 21;12(7):1848-1857.