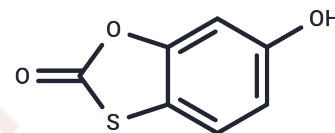


Tioxolone

Chemical Properties

CAS No. : 4991-65-5
Formula: C₇H₄O₃S
Molecular Weight: 168.17
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	Tioxolone is a metalloenzyme carbonic anhydrase I inhibitor.
Targets(IC50)	Apoptosis,Carbonic Anhydrase,Parasite,Autophagy
In vitro	Tioxolone, along with its Benzoxathiol derivatives, exhibits antibacterial and antifungal properties, as well as inhibitory effects on cell proliferation. These compounds have been utilized in topical treatments for common psoriasis and acne.
In vivo	Tioxolone exhibits sebum-regulating and antibacterial properties, thus it is incorporated in various cosmetics such as shampoos and skin cleansers.

Solubility Information

Solubility	Ethanol: 32 mg/mL (190.28 mM),Sonication is recommended. H ₂ O: < 1 mg/mL (insoluble or slightly soluble), DMSO: 45 mg/mL (267.59 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 (11.89 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	5.9464 mL	29.7318 mL	59.4636 mL
5 mM	1.1893 mL	5.9464 mL	11.8927 mL
10 mM	0.5946 mL	2.9732 mL	5.9464 mL
50 mM	0.1189 mL	0.5946 mL	1.1893 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

Byres M, et al. Acta Crystallogr C, 2004 , 60(Pt 6), o395-o396.

Kim BH, et al. Exp Mol Med, 2011, 43(5), 313-321.

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