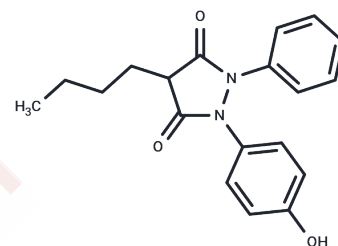


Oxyphenbutazone

Chemical Properties

CAS No. :	129-20-4
Formula:	C ₁₉ H ₂₀ N ₂ O ₃
Molecular Weight:	324.37
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	Oxyphenbutazone is an active metabolite of Phenylbutazone, an orally active COX inhibitor with antimicrobial and anti-inflammatory activity, selectively kills non-replicating Mycobacterium tuberculosis, and induces bone marrow failure.
Targets(IC50)	Antibacterial, COX
In vitro	Oxyphenbutazone enhances the anticancer effect of methotrexate (MTX) in Hep3B cells with hepatocyte repair. In Hep3B cells, 2.5-7.5 μM Oxyphenbutazone, treated for 48 hours, exhibited significant cytotoxicity when combined with MTX (0.25-1.0 μM). [1]
In vivo	In combination with MTX (5.0 or 2.5 mg/kg/week, intraperitoneal injection), Oxyphenbutazone (70 mg/kg/week, orally, in two divided doses, for 13 weeks of treatment) showed potential anticancer activity. [1]

Solubility Information

Solubility	DMSO: 135 mg/mL (416.19 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (30.83 mM), Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (30.83 mM), Solution. <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	3.0829 mL	15.4145 mL	30.829 mL
5 mM	0.6166 mL	3.0829 mL	6.1658 mL
10 mM	0.3083 mL	1.5414 mL	3.0829 mL
50 mM	0.0617 mL	0.3083 mL	0.6166 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

Saleem S, et al. Oxyphenbutazone promotes cytotoxicity in rats and Hep3B cells via suppression of PGE2 and deactivation of Wnt/ β -catenin signaling pathway. *Mol Cell Biochem.* 2018 Jul;444(1-2):187-196.

Gold B, et al. Nonsteroidal anti-inflammatory drug sensitizes Mycobacterium tuberculosis to endogenous and exogenous antimicrobials. *Proc Natl Acad Sci U S A.* 2012 Oct 2;109(40):16004-11.

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