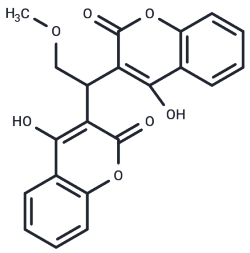
Data Sheet (Cat.No.T10867)

TargetMol

Coumetarol

Chemical Properties



CAS No. : 4366-18-1

Formula: C21H16O7

Molecular Weight: 380.35

Storage: Store at low temperature
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	Coumetarol (Dicumoxane) is a vitamin K antagonist and an oral anticoagulant that can be used to study arterial thrombotic occlusion.
Targets(IC50)	Others,Vitamin
In vitro	The vitamin K antagonist Coumetarol (Dicumoxane) is effective in both models after oral treatment but inhibits thrombus formation more strongly in the arterio-venous shunt model. Treatment with Coumetarol in a dose of 25 mg/kg p.o. twice daily for 2 days results in a significant reduction in thrombus weight by 50% in the venous stasis model and by 75% in the arterio-venous shunt model. In both experiments, the coagulation time as measured by the Thrombotest is prolonged to the same extent.
In vivo	The vitamin K antagonist Coumetarol showed efficacy in both models after oral treatment, particularly demonstrating stronger thrombotic inhibition in the arteriolar junction model. Coumetarol was administered orally at a therapeutic dose of 25 mg/kg. Twice-daily administration for two consecutive days resulted in a significant 50% reduction in thrombus weight in the venous pause model and a significant 75% reduction in the arterial cleft shunt model. [1]

Solubility Information

Solubility	DMSO: 180 mg/mL (473.25 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: 4 mg/mL (10.52 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	2.6292 mL	13.1458 mL	26.2916 mL
5 mM	0.5258 mL	2.6292 mL	5.2583 mL
10 mM	0.2629 mL	1.3146 mL	2.6292 mL
50 mM	0.0526 mL	0.2629 mL	0.5258 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

Vogel GM, et al. Comparison of two experimental thrombosis models in rats effects of four glycosaminoglycans. Thromb Res. 1989 Jun 1;54(5):399-410.