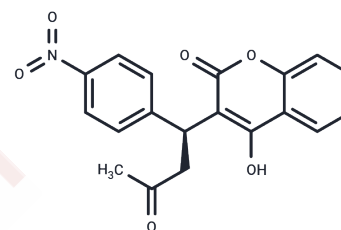


(S)-Acenocoumarol

Chemical Properties

CAS No. :	66556-78-3
Formula:	C ₁₉ H ₁₅ NO ₆
Molecular Weight:	353.33
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	Acenocoumarol is a short-lived oral anti-coagulant, which, like warfarin, functions by inhibiting vitamin K epoxide reductase. It has higher intrinsic anticoagulant potency than warfarin and phenprocoumon, when evaluated in vitro. Acenocoumarol has a single chiral center that gives rise to two different enantiomeric forms. (S)-Acenocoumarol has a shorter plasma elimination half-life (1.8 hours) and faster plasma clearance (28.5 L/hour), compared to the (R)-enantiomer (6.6 hours, 1.9 L/hour). The S-enantiomer undergoes extensive first-pass metabolism during absorption from the gastrointestinal tract, whereas (R)-acenocoumarol is rapidly absorbed and provides essentially complete oral bioavailability. Perhaps related to these pharmacokinetic characteristics, (S)-acenocoumarol is less potent in vivo as an anti-coagulant than the (R)-enantiomer. As the clearance of acenocoumarol is ~20-fold faster than that for warfarin, the plasma concentrations of acenocoumarol are substantially lower than those for warfarin in patients receiving long-term treatment.
Targets(IC50)	Others

Solubility Information

Solubility	Ethanol: 0.2 mg/mL (0.57 mM), Sonication is recommended. DMF: 20 mg/mL (56.6 mM), Sonication is recommended. DMSO: 10 mg/mL (28.3 mM), Sonication is recommended. DMF:PBS (pH 7.2)(1:3): 0.25 mg/mL (0.71 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8302 mL	14.1511 mL	28.3022 mL
5 mM	0.566 mL	2.8302 mL	5.6604 mL
10 mM	0.283 mL	1.4151 mL	2.8302 mL
50 mM	0.0566 mL	0.283 mL	0.566 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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