

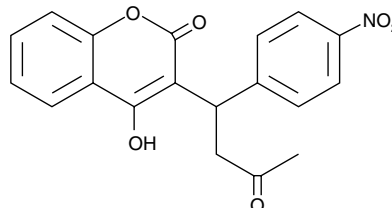
Product Information



Acenocoumarol

Item No. 10010569

CAS Registry No.: 152-72-7
Formal Name: 4-hydroxy-3-[1-(4-nitrophenyl)-3-oxobutyl]-2H-1-benzopyran-2-one
Synonyms: Acenocoumarin, G-23350, Nicoumalone, Sinthrome®, Sintrom®
MF: C₁₉H₁₅NO₆
FW: 353.3
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that acenocoumarol be stored as supplied at -20°C. It should be stable for at least two years.

Acenocoumarol is supplied as a crystalline solid. A stock solution may be made by dissolving the acenocoumarol in an organic solvent purged with an inert gas. Acenocoumarol is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of acenocoumarol in ethanol is approximately 0.2 mg/ml and approximately 10 mg/ml in DMSO and DMF.

Acenocoumarol is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, acenocoumarol should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Acenocoumarol has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Acenocoumarol is an analog of the oral anticoagulant warfarin that functions by inhibiting vitamin K epoxide reductase, an enzyme that has a critical role in enabling blood coagulation.¹ It is a brief-acting compound with a half-life of about eight hours in plasma, which is four times shorter than that of warfarin.²

References

1. Ufer, M. Comparative pharmacokinetics of vitamin K antagonists warfarin, phenprocoumon and acenocoumarol. *Clin. Pharmacokinet.* **44**(12), 1227-1246 (2005).
2. Thijssen, H.H., Flinois, J.-P., and Beaune, P.H. Cytochrome P450C9 is the principal catalyst of racemic acenocoumarol hydroxylation reactions in human liver microsomes. *Drug Metab. Dispos.* **28**(11), 1284-1290 (2000).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/10010569

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WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

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