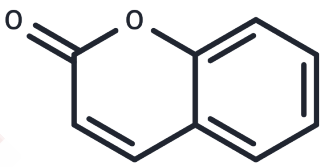
Data Sheet (Cat.No.T0775)

TargetMol

Coumarin

Chemical Properties



CAS No. : 91-64-5

Formula: C9H6O2

Molecular Weight: 146.14

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Coumarin is a chemical compound/poison found in many plants, notably in high concentration in the tonka bean, woodruff, and bison grass. It has clinical value as the precursor for several anticoagulants, notably warfarin.
Targets(IC50)	Factor Xa,Influenza Virus
In vitro	Coumarin is a fragrant organic chemical compound in the benzopyrone chemical class, which is a colorless crystalline substance in its standard state. Coumarin is a naturally occurring constituent of many plants and essential oils, including tonka beans, sweet clover, woodruff, oil of cassia, and lavender. Coumarin is a member of a class of compounds called benzopyrones. Coumarin compounds have been used to treat such diverse ailments as cancer, bums, brucellosis, and rheumatic disease, and they have been used as antispasmodics. Although coumarin itself has no anticoagulant properties, it is transformed into the natural anticoagulant dicoumarol by a number of species of fungi. This occurs as the result of the production of 4-hydroxycoumarin, then further into the actual anticoagulant dicoumarol, a fermentation product and mycotoxin. This substance is responsible for the bleeding disease known historically as 'sweet clover disease' in cattle eating moldy sweet clover silage.[1]

Solubility Information

Solubility	DMSO: 45 mg/mL (307.92 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: 28 mg/mL (191.6 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	6.8428 mL	34.2138 mL	68.4275 mL
5 mM	1.3686 mL	6.8428 mL	13.6855 mL
10 mM	0.6843 mL	3.4214 mL	6.8428 mL
50 mM	0.1369 mL	0.6843 mL	1.3686 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.

Reference

Egan D, et al. Drug Metab Rev, 1990, 22(5), 503-529.

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481