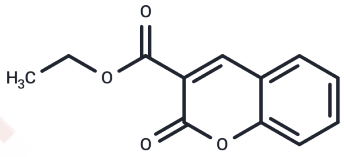
Data Sheet (Cat.No.TJS0311)

TargetMol

Ethyl 3-coumarincarboxylate

Chemical Properties



CAS No. :	1846-76-0
Formula:	C12H10O4
Molecular Weight:	218.21
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	Ethyl coumarin-3-carboxylate, a coumarin derivative, serves as a pseudo-template for the synthesis of Molecularly Imprinted Polymers (MIPs) that specifically recognize aflatoxins.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: 60 mg/mL (274.96 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: 2 mg/mL (9.17 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	4.5827 mL	22.9137 mL	45.8274 mL
5 mM	0.9165 mL	4.5827 mL	9.1655 mL
10 mM	0.4583 mL	2.2914 mL	4.5827 mL
50 mM	0.0917 mL	0.4583 mL	0.9165 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

Fonseca, F., Baldissera, L., Camargo, E., Antunes, E., Diz-Filho, E., & Corrêa, A. et al. (2010). Effect of the synthetic coumarin, ethyl 2-oxo-2H-chromene-3-carboxylate, on activity of Crotalus durissus ruruima sPLA2 as well as on edema and platelet aggregation induced by this factor. Toxicon, 55(8), 1527-1530. doi: 10.1016/j.toxicon.2010.03.004

Murakami, M., Ohkubo, K., Nanjo, T., Souma, K., Suzuki, N., & Fukuzumi, S. (2010). Photoinduced Electron Transfer in Photorobust Coumarins Linked with Electron Donors Affording Long Lifetimes of Triplet Charge-Separated States. Chemphyschem, 11(12), 2594-2605. doi: 10.12002/cphc.20120020096