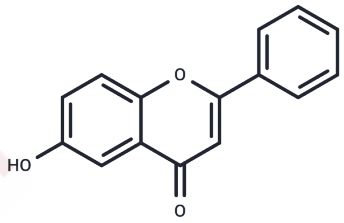
Data Sheet (Cat.No.T2940)

TargetMol

6-Hydroxyflavone

Chemical Properties



CAS No. :	6665-83-4
Formula:	C15H10O3
Molecular Weight:	238.24
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	6-Hydroxyflavone (6-HF) is a noncompetitive inhibitors of cytochrome P450 2C9. It is a flavone, a type of chemical compound. It is reported in leaves of Barleria prionitis Linn. (a common Acanthaceae from India). 6-Hydroxyflavone may have a potential as a therapeutic drug capable for the treatment of anxiety-like disorders.
Targets(IC50)	ERK,Akt,GABA Receptor,JNK
Kinase Assay	For Jak3 kinase assays, Fsk-treated MT-2 cells are lysed, clarified, and immunoprecipitated using Jak3 antibody. Kinase reactions are carried out at 30°C for 20 min. For PKA kinase assays, untreated MT-2 cells are lysed, and Jak3 is immunoprecipitated and bound to PAS beads. Immunoprecipitated Jak3 is washed with kinase buffer (50 mM Hepes-NaOH (pH 7.4), 10 mM MgCl2, 0.5 mM EGTA, 0.5 mM DTT, 20 μg/mL aprotinin, 10 μg/mL leupeptin, 1 μg/mL pepstatin A) and incubated with 200 μM ATP and purified protein kinase A catalytic subunit (PKAc) as indicated in the figure legends. Kinase reactions are carried out at 32 °C for 30 min followed by vigorous washing of the beads with cold kinase wash buffer. For [γ-32P]ATP radiolabeled kinase assays using recombinant Jak3, Hek293 cells are transfected with wild type (WT) Jak3 or kinase-dead Jak3 K855A using Lipofectamine 2000 according to the manufacturer's instructions. Cells are lysed and immunoprecipitated with Jak3 antibody. Jak3-bound PAS beads are washed three times in cold lysis buffer followed by kinase buffer. Kinase reactions are initiated by adding 10 μCi [γ-32P]ATP, 10 μM unlabeled ATP, and 1 μg of purified PKAc to Jak3-bound PAS bead reaction mixtures. Kinase reactions are performed at 32°C for 30 min. Jak3-bound PAS beads are washed three times in radioimmunoassay buffer (10 mM Tris-HCl, pH 7.4, 75 mM NaCl, 20 mM EDTA, 10 mM EGTA, 20 mM Na4P2O7, 50 mM NaF, 20 mM 2-glycerolphosphate, 1 mM p-nitrophenylphosphate, 0.1% Triton X-100) and one time in kinase wash buffer. The reactions are stopped by adding 2× SDS-PAGE sample buffer followed by SDS-PAGE. Coomassie stainable Jak3 bands are excised from the PVDF membrane and subjected to phosphoamino acid analysis[2].

Solubility Information

Solubility	DMSO: 252.5 mg/mL (1059.86 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: 10 mg/mL (41.97 mM),Solution. 10% DMSO+90% Saline: < 10 mg/mL (41.97 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *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	4.1974 mL	20.9872 mL	41.9745 mL
5 mM	0.8395 mL	4.1974 mL	8.3949 mL
10 mM	0.4197 mL	2.0987 mL	4.1974 mL
50 mM	0.0839 mL	0.4197 mL	0.8395 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

Wang X, et al. PLoS One. 2015 Mar 19;10(3):e0116409.