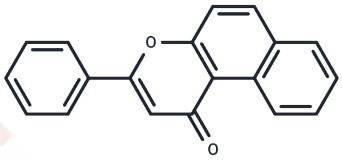
Data Sheet (Cat.No.TN6694)

TargetMol

5,6-Benzoflavone

Chemical Properties



CAS No. : 6051-87-2

Formula: C19H12O2

Molecular Weight: 272.3

Storage: Keep away from direct sunlight
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	5,6-Benzoflavone (β-Naphthoflavone) is an exogenous ligand for the aryl hydrocarbon receptor, which disrupts zinc homeostasis in human hepatocellular carcinoma HepG2 cells. 5,6-Benzoflavone (β-Naphthoflavone) possesses anti-inflammatory and antioxidant activities, inhibits LPS-induced inflammation through the AKT/Nrf-2/HO-1-NF-kappaB signaling axis, inhibits TNF-α-induced ICAM-1 and VCAM-1 expression, which can be used to study neurodegenerative diseases.
Targets(IC50)	Apoptosis,Antioxidant,Aryl Hydrocarbon Receptor

Solubility Information

Solubility	DMSO: 35.71 mg/mL (131.14 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 3.57 mg/mL (13.11 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% Corn Oil: 1 mg/mL (3.67 mM),Sonication is recommended. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.57 mg/mL (13.11 mM),Suspension. *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	3.6724 mL	18.3621 mL	36.7242 mL
5 mM	0.7345 mL	3.6724 mL	7.3448 mL
10 mM	0.3672 mL	1.8362 mL	3.6724 mL
50 mM	0.0734 mL	0.3672 mL	0.7345 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

Ishida T,et al. β-Naphthoflavone, an exogenous ligand of aryl hydrocarbon receptor, disrupts zinc homeostasis in human hepatoma HepG2 cells. J Toxicol Sci. 2019;44(10):711-720.
Zhu Y, et al. α- and β-Naphthoflavone synergistically attenuate H2O2-induced neuron SH-SY5Y cell damage. Exp Ther Med. 2017 Mar;13(3):1143-1150.