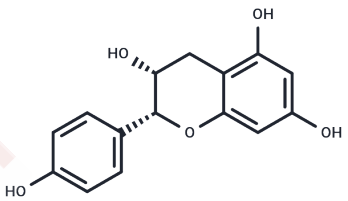
Data Sheet (Cat.No.TN1606)

TargetMol

(-)-Epiafzelechin

Chemical Properties



CAS No. : 24808-04-6

Formula: C15H14O5

Molecular Weight: 274.27

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	(-)-Epiafzelechin is a COX inhibitor with antioxidant and anti-inflammatory activity, osteoprotective effects in a mature ovariectomized mouse model, ability to stimulate osteoblast activity and inhibit osteoclast activity.
Targets(IC50)	Antioxidant,COX
In vitro	(-)-Epiafzelechin exhibits significant antioxidant activity with an EC50 of 20.9μM[1].

Solubility Information

Solubility	DMSO: 50 mg/mL (182.3 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 (7.29 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	3.646 mL	18.2302 mL	36.4604 mL
5 mM	0.7292 mL	3.646 mL	7.2921 mL
10 mM	0.3646 mL	1.823 mL	3.646 mL
50 mM	0.0729 mL	0.3646 mL	0.7292 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

Antioxidant Phenolic Compounds From the Rhizomes of Astilbe Rivularis. Nat Prod Res. 2018 Feb;32(4):453-456.
Wong KC,et al. (-)-Epiafzelechin Protects against Ovariectomy-induced Bone Loss in Adult Mice and Modulate Osteoblastic and Osteoclastic Functions In Vitro. Nutrients. 2017;9(5):530.
Min KR, et al. (-)-Epiafzelechin: cyclooxygenase-1 inhibitor and anti-inflammatory agent from aerial parts of Celastrus orbiculatus. Planta Med. 1999;65(5):460-462.