Data Sheet (Cat.No.T4000)



(±)-Equol

Chemical Properties

CAS No.: 94105-90-5

Formula: C15H14O3

Molecular Weight: 242.27

Appearance: no data available

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

Biological Description

Description	(±)-Equol ((R,S)-Equol) is a non-steroidal estrogen produced from the metabolism of the isoflavonoid phytoestrogen daidzen by human intestinal microflora. The estrogen receptor (ER) agonist activity of the naturally occurring (S)-enantiomer (EC50 = 85 and 65 nM for human ER α and ER β , respectively) is similar to that of genistein but exceeds that of daidzein. (±)-Equol preferentially binds ER β (Ki = 0.73 nM) and demonstrates approximately 9-fold lower affinity for ER α (Ki = 6.41 nM). (±)-Equol is also a potent antagonist of dihydrotestosterone, which has important implications for prostate cancer and other androgen-mediated pathologies.
Targets(IC50)	Estrogen Receptor/ERR,Estrogen/progestogen Receptor,Drug Metabolite

Solubility Information

Solubility	DMSO: 100 mg/mL (412.76 mM), Sonication is recommended.	
	(< 1 mg/ml refers to the product slightly soluble or insoluble)	

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.1276 mL	20.6381 mL	41.2763 mL
5 mM	0.8255 mL	4.1276 mL	8.2553 mL
10 mM	0.4128 mL	2.0638 mL	4.1276 mL
50 mM	0.0826 mL	0.4128 mL	0.8255 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

Mahalingam S, Gao L, Gonnering M, Helferich W, et al.Toxicol Appl Pharmacol. 2016 Mar 15;295:47-55. Hazim S, Curtis PJ, Schär MY, et al.Am J Clin Nutr. 2016 Mar;103(3):694-702.

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