

(S,S)-Secoisolariciresinol diglucoside

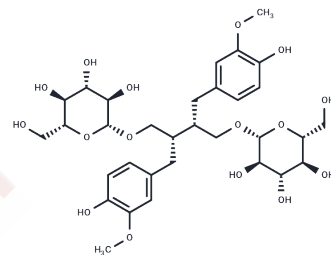
Chemical Properties

CAS No. : 257930-74-8

Formula: C₃₂H₄₆O₁₆

Molecular Weight: 686.7

Storage: Store at low temperature, Store under nitrogen
 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	(S,S)-Secoisolariciresinol diglucoside ((S,S)-SDG) is a lignan present in flaxseed with anti-inflammatory, antioxidant, anti-microbial and neuroprotective properties and can be used in the study of obesity, arthritis and osteoporosis.
Targets(IC50)	Antioxidant
In vitro	Secoisolariciresinol diglucoside is a major lignan component in flaxseed and exhibits potent antioxidant activity in vitro, acting as an effective scavenger of free hydroxyl radicals[1].
In vivo	Secoisolariciresinol diglucoside (oral administration; 4 mg/mouse) administered to 10-week-old male mice 2 hours before the administration of tumor necrosis factor alpha (TNF α) significantly reduced the adhesion of leukocytes to the endothelium by 50% and the migration of leukocytes across the blood-brain barrier by 64%[2].

Solubility Information

Solubility	H ₂ O: 80 mg/mL (116.5 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.4562 mL	7.2812 mL	14.5624 mL
5 mM	0.2912 mL	1.4562 mL	2.9125 mL
10 mM	0.1456 mL	0.7281 mL	1.4562 mL
50 mM	0.0291 mL	0.1456 mL	0.2912 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

Mishra OP, et al. Synthesis and antioxidant evaluation of (S,S)- and (R,R)-secoisolariciresinol diglucosides (SDGs). *Bioorg Med Chem Lett*. 2013 Oct 1;23(19):5325-8.

Rom S, et al. Secoisolariciresinol diglucoside is a blood-brain barrier protective and anti-inflammatory agent: implications for neuroinflammation. *J Neuroinflammation*. 2018 Jan 27;15(1):25.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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