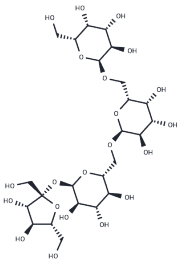
Data Sheet (Cat.No.T5809)

TargetMol

Stachyose hydrate

Chemical Properties



CAS No. : 54261-98-2

Formula: C24H42O21. xH2O

Molecular Weight:

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	Stachyose hydrate is a natual product,it highly promotes proliferation of lactic acid bacteria (LAB) by inducing LAB to produce more α-galactosidase to hydrolyze stachyose.
Targets(IC50)	Apoptosis,Others,Endogenous Metabolite
In vitro	The stachyose highly promotes proliferation of lactic acid bacteria (LAB) by inducing LAB to produce more α-galactosidase to hydrolyze stachyose, increasing glycometabolism and cytoactivity of LAB, which revealed the mechanisms how the stachyose promotes the proliferation of LAB.
In vivo	Stachyose promotes bioavailability of genistein through inhibiting intestinal degradation and first-pass metabolism of genistein in mice.
Animal Research	Male Kunming mice in each group (n = 8) were administered by intragastric gavage with saline, stachyose (250 mg/kg·bw), genistein (100 mg/kg·bw), and stachyose (50, 250, and 500 mg/kg·bw) together with genistein (100 mg/kg·bw) for 4 consecutive weeks, respectively, and then their urine, feces, blood, gut, and liver were collected.?UPLC-qTOF/MS analysis .

Solubility Information

Solubility	DMSO: 250.00 mg/mL,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL,Solution. *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.*

Reference

Lu Y , Lin D , Li W , et al. Non-digestible stachyose promotes bioavailability of genistein through inhibiting intestinal degradation and first-pass metabolism of genistein in mice[J]. Food & Nutrition Research, 2017, 61(1): 1369343.

Zhang Q, Liu X, Li Z, et al. Rapid quantitative analysis with low matrix effects of capsaicin in various samples by thermal desorption carbon fiber ionization mass spectrometry[J]. Analytica chimica acta. 2019, 1048: 115-122.

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