Syringic acid

Cat. No.: HY-N0339

CAS No.: 530-57-4

Molecular Formula: $C_9H_{10}O_5$

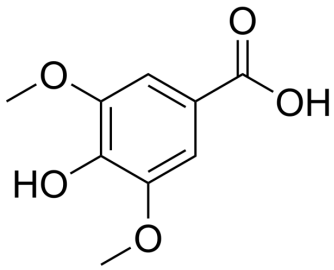
Molecular Weight: 198.17

Target: Endogenous Metabolite; Bacterial

Pathway: Metabolic Enzyme/Protease; Anti-infection

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	2 years
	-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 62.5 mg/mL (315.39 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	5.0462 mL	25.2309 mL	50.4617 mL
	5 mM	1.0092 mL	5.0462 mL	10.0923 mL
	10 mM	0.5046 mL	2.5231 mL	5.0462 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (10.50 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.08 mg/mL (10.50 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (10.50 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Syringic acid is correlated with high antioxidant activity and inhibition of LDL oxidation.

IC_{50} & Target

Microbial Metabolite | Human Endogenous Metabolite

In Vitro

Syringic acid is a phenol present in some distilled alcohol beverages. It is also a product of microbial (gut) metabolism of anthocyanins and other polyphenols that have been consumed[1]. Research suggests that phenolics from wine may play a positive role against oxidation of low-density lipoprotein (LDL), which is a key step in the development of atherosclerosis.

Syringic acid is correlated with high antioxidant activity and inhibition of LDL oxidation[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Forester SC, et al. Identification of Cabernet Sauvignon anthocyanin gut microflora metabolites. J Agric Food Chem. 2008 Oct 8;56(19):9299-304.

[2]. Kalkan Yildirim H, et al. Protection capacity against low-density lipoprotein oxidation and antioxidant potential of some organic and non-organic wines. Int J Food Sci Nutr. 2004 Aug;55(5):351-62.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA