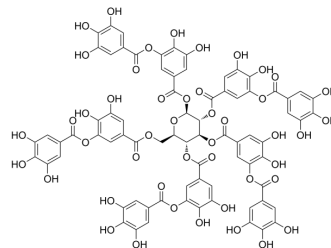


Chinese gallotannin

Cat. No.:	HY-135530
CAS No.:	5424-20-4
Molecular Formula:	C ₇₆ H ₅₂ O ₄₆
Molecular Weight:	1701.2
Target:	Amylases
Pathway:	Metabolic Enzyme/Protease
Storage:	Powder -20°C 3 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (58.78 mM; Need ultrasonic)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		0.5878 mL	2.9391 mL	5.8782 mL
	5 mM		0.1176 mL	0.5878 mL	1.1756 mL
	10 mM		0.0588 mL	0.2939 mL	0.5878 mL

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

BIOLOGICAL ACTIVITY

Description

Chinese gallotannin is a non-specific promiscuous α -amylase inhibitor with a K_i of 0.82 μ g/mL for human salivary α -amylase. Chinese gallotannin can be used for the research of diabetes^[1].

IC₅₀ & Target

Ki: 0.82 μ g/mL (Human Salivary α -Amylase)^[1]
 IC₅₀: 2.3 μ g/mL (Porcine Pancreatic α -Amylase), 128.9 nM (Telomerase), 3.0 μ M (Fatty acid synthase), 6.9 μ M (α -Ketoglutarate-Dependent Dioxygenase AlkB), 7.8 μ M (5 α -Reductase), 24.2 μ M (Poly(ADP-ribose) Glycohydrolase)^[1]

REFERENCES

[1]. Szabó K, et al. Gallotannins are non-specific inhibitors of α -amylase: Aggregates are the active species taking part in inhibition. Chem Biol Drug Des. 2021 Feb;97(2):349-357.

Caution: Product has not been fully validated for medical applications. For research use only.

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