

Product Name : 1,2,3,4,6-O-Pentagalloylglucose

Synonyms : PentagalloyIglucose; DB-03208; DB 03208

Cat No. : M18051

CAS Number : 14937-32-7

Molecular Formula : C41H32O26

Formula Weight : 940.68

Chemical Name : Beta-1,2,3,4,6-Penta-O-Galloyl-D-Glucopyranose

1, 2, 3, 4, 6-Pentagalloylglucose and gallic acid from Pistacia lentiscus have antimutagenic and antioxidant activities. 2. 1, 2, 3, 4, 6-Penta-O-galloyl-beta-D-glucose (PGG) possesses potent anti-proliferative and anti-invasive effects, it also has inhibition of inducible nitric oxide synthase and cyclooxygenase-2 activity. 3. PGG may serve as a model for the development of new types of anti-diabetic and anti-metabolic syndrome therapeutics. 4. 1, 2, 3, 4, 6-Penta- O -galloyl-β- d -

glucose has vasodilatory and anti-inflammatory effects, it dilates vascular smooth muscle and suppresses the vascular inflammatory process via endothelium-dependent nitric oxide (NO)/cGMP signaling. 5. 1, 2, 3, 4, 6-Penta-O-galloyl-beta-D-

glucose can decrease the level of extracellular hepatitis B virus (HBV) (IC5, 1. microg/ml) in a dose-dependent manner, it also can reduce the HBsAg level by 25% at a concentration of 4 microg/ml; the gallate structure of PGG may play a critical role in the inhibition of anti-HBV activity, suggests that PGG could be a candidate for developing an anti-HBV agent. 6. 1, 2, 3, 4, 6-Penta-O-galloyl-β-D-glucose has anti-parasitic activity, displays an EC5 value of 67 μM, at least 6.6-fold more

effective than the standard drug benznidazole against trypomastigote forms of T. cruzi.

Pathway : Others

Description

Target : Antioxidant

Receptor : Others

 $\textbf{Solubility} \hspace{1cm} : \hspace{1cm} \mathsf{DMSO} : 50 \hspace{1cm} \mathsf{mg/mL} \hspace{1cm} 53.15 \hspace{1cm} \mathsf{mM}; \hspace{1cm} \mathsf{H2O} : 6 \hspace{1cm} \mathsf{mg/mL} \hspace{1cm} 6.38 \hspace{1cm} \mathsf{mM};$

SMILES : c1c(cc(c(c10)0)0)C(=0)OC[C@@H]1[C@H]([C@@H]([C@@H]

Storage : (-20°ℂ)

Stability : ≥ 2 years

Reference :

1. Abdelwahed A, et al. Chem Biol Interact. 2007 Jan 5;165(1):1-13.