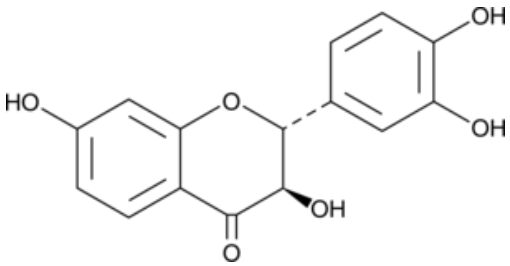
Product Data Sheet

Product Name: Fustin
Cat. No.: GC52047

Chemical Properties

Cas. No.	20725-03-5		
SMILES	OC(C=CC([C@H]1OC2=CC(O)=CC=C2C([C@@H]1O)=O)=C3)=C3O		
Formula	C15H12O6	M.Wt	288.3
Solubility	Acetone: soluble,Chloroform: soluble,Dichloromethane: soluble,DMSO: soluble,Ethyl Acetate: soluble	Storage	-20°C
General tips	For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months.		
Shipping Condition	Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.		
Structure			

Background

Fustin is a polyketide synthase-derived flavanone that has been found in *R. verniciflua* and has diverse biological activities.[1,2,3,4] It enhances epigallocatechin-3-O-gallate-induced decreases in the viability of U266 multiple myeloma cells when used at concentrations of 5 and 10 µM.[2] Fustin (50 and 100 mg/kg) inhibits increases in blood glucose levels, as well as serum total cholesterol, triglyceride, and malondialdehyde (MDA) levels, in a mouse model of diabetes induced by streptozotocin .[3] It prevents decreases in contextual- and tone fear conditioning freezing time, indicating a reversal of memory deficits, induced by amyloid-β (1-42) (Aβ42) in mice when administered at a dose of 100 mg/kg.[4]

Caution: Product has not been fully validated for medical applications. For research use only.
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1.MarÍn, L., GutiÉrrez-Del-RÍo, I., Villar, C.J., et al.De novo biosynthesis of garbanzol and fustin in Streptomyces albus based on a potential flavanone 3-hydroxylase with 2-hydroxylase side activityMicrob. Biotechnol.14(5)2009-2024(2021) 2.Kumazoe, M., Fujimura, Y., Yoshitomi, R., et al.Fustin, a flavanonol, synergically potentiates the anticancer effect of green tea catechin epigallocatechin-3-O-gallate with activation of the eNOS/cGMP axisJ. Agric. Food Chem.70(11)3458-3466(2022) 3.Gilani, S.J., Bin-Jumah, M.N., Al-Abbasi, F.A., et al.Fustin ameliorates hyperglycemia in streptozotocin induced type-2 diabetes via modulating glutathione/superoxide dismutase/catalase expressions, suppress lipid peroxidation and regulates histopathological changesSaudi J. Biol. Sci.28(12)6963-6971(2021) 4.Jin, C.-H., Shin, E.-J., Park, J.-B., et al.Fustin flavonoid attenuates β-amyloid (1-42)-induced learning impairmentJ. Neurosci. Res.87(16)3658-3670(2009)

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