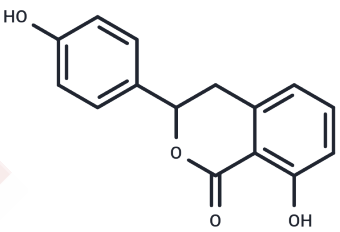
Data Sheet (Cat.No.TN4234)

TargetMol

Hydrangenol

Chemical Properties



CAS No. : 480-47-7

Formula: C15H12O4

Molecular Weight: 256.25

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	Hydrangenol is a natural product and can be isolated from Hydrangea serrata leaves. Hydrangenol is an antiphotoaging compound with oral activity. Hydrangenol can reduce MMP and inflammatory cytokine expression and increase moisturizing factors and antioxidant genes level, result in preventing wrinkle formation.
Targets(IC50)	MMP,ERK,NOS,NF-κB,Nrf2,NO Synthase,Antifection,Autophagy,COX,Interleukin,p38 MAPK
In vitro	Hydrangenol increased the expression of involucrin, filaggrin, and aquaporin-3 (AQP3) as well as hyaluronic acid (HA) production via hyaluronidase (HYAL)-1/-2 downregulation. Consistent with the recovery of collagen composition, the expression of Pro-COL1A1 was increased by hydrangenol[1].

Solubility Information

Solubility	DMSO: 60 mg/mL (234.15 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.9024 mL	19.5122 mL	39.0244 mL
5 mM	0.7805 mL	3.9024 mL	7.8049 mL
10 mM	0.3902 mL	1.9512 mL	3.9024 mL
50 mM	0.078 mL	0.3902 mL	0.7805 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Myung DB, et al. Hydrangenol Isolated from the Leaves of Hydrangea serrata Attenuates Wrinkle Formation and Repairs Skin Moisture in UVB-Irradiated Hairless Mice. Nutrients. 2019 Oct 2;11(10):2354.

Gho Y, et al. Hydrangenol suppresses VEGF-stimulated angiogenesis by targeting p27KIP1-dependent G1-cell cycle arrest, VEGFR-2-mediated signaling, and MMP-2 expression. Anim Cells Syst (Seoul). 2019 Feb 14;23(2):72-81.

Kim HJ, et al. Hydrangenol inhibits lipopolysaccharide-induced nitric oxide production in BV2 microglial cells by suppressing the NF-κB pathway and activating the Nrf2-mediated HO-1 pathway. Int Immunopharmacol. 2016 Jun;35:61-69.