Data Sheet (Cat.No.TN1042)



Chebulic acid

Chemical Properties

CAS No.: 23725-05-5 Formula: C14H12O11

Molecular Weight: 356.24
Appearance: N/A

Storage: 0-4°C for short term (days to weeks), or -20°C for long term (months).

Biological Description

Description	Chebulic acid, a phenolcarboxylic acid compound isolated from Terminalia chebula, has potent anti-oxidant activity, which breaks the cross-links of proteins induced by advanced glycation end-products (AGEs) and inhibits the formation of AGEs. It has effects against the progression of AGE-induced endothelial cell dysfunction, may constitute a promising intervention agent against diabetic vascular complications
Targets(IC ₅₀)	VEGFR: None ROS: None
In vitro	chebulic acid prevents the glycer-AGEs-induced ROS formation of LX-2 cells and collagen accumulation by ERK-phosphorylation-mediated Nrf2 nuclear translocation, which causes upregulation of antioxidant protein production[2].

Solubility Information

Solubility	DMSO: 260 mg/mL (729.85 mM)	
	(< 1 mg/ml refers to the product slightly soluble or insoluble)	

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.807 mL	14.035 mL	28.071 mL
5 mM	0.561 mL	2.807 mL	5.614 mL
10 mM	0.281 mL	1.404 mL	2.807 mL
50 mM	0.056 mL	0.281 mL	0.561 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

Reference

- 1. Effects of chebulic acid on advanced glycation endproducts-induced collagen cross-links. Biol Pharm Bull. 2014;37(7):1162-7. Epub 2014 Apr 24.
- 2. Koo Y C, Pyo M C, Nam M H, et al. Chebulic acid prevents hepatic fibrosis induced by advanced glycation end-products in LX-2 cell by modulating Nrf2 translocation via ERK pathway.[J]. Toxicology in Vitro, 2016, 34:8-15.

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