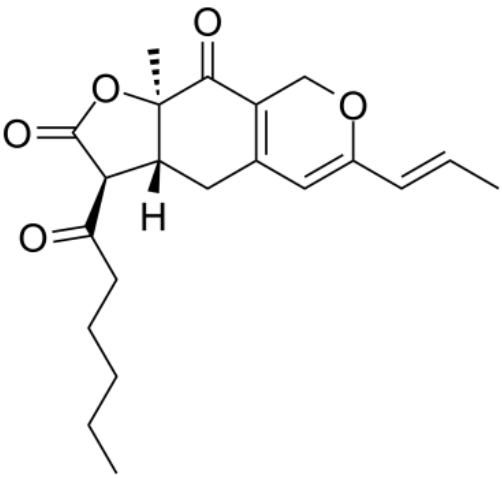
Product Data Sheet

Product Name: Monascin
Cat. No.: GC38930

Chemical Properties

Cas. No.	21516-68-7		
SMILES	O=C([C@@H]1C(CCCCC)=O)O[C@]2(C)[C@]1([H])CC(C=C(/C=C/C)OC3)=C3C2=O		
Formula	$C_{21}H_{26}O_5$	M.Wt	358.43
Solubility	DMSO : 50 mg/mL (139.50 mM; Need ultrasonic)	Storage	Store at -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

Monascin is a kind of azaphilonoid pigments extracted from Monascus pilosus-fermented rice (red-mold rice). Monascin also exhibits anti-tumor-initiating activity and anti-inflammatory activity with oral administration. Monascin inhibits the activation of NOR 1 (an NO donor)[1][2].

Monascin (0.0025% in drinking water; mice) appears effective for the inhibition of UVB-initiated carcinogenesis on mouse skin[1]. Animal Model: SENCAR mouse using a UVB irradiation as an

initiator and TPA as a promoter[1].

[1]. Akihisa T, et al. Anti-tumor-initiating effects of monascin, an azaphilonoid pigment from the extract of Monascus pilosus fermented rice (red-mold rice). Chem Biodivers. 2005 Oct;2(10):1305-9.
[2]. Lee CL, et al. Monascus fermentation of dioscorea for increasing the production of cholesterol-lowering agent--monacolin K and antiinflammation agent--monascin. Appl Microbiol Biotechnol. 2006 Oct;72(6):1254-62.