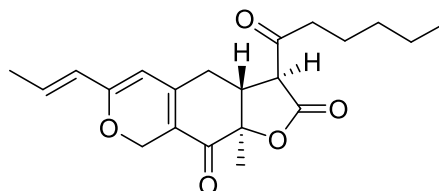


Monascin

Code No.: **BIA-M1973**

Pack sizes: **0.5 mg, 2.5 mg**



Synonyms : Monascoflavin, Monascoflavine

Specifications

CAS #	: 21516-68-7
Molecular Formula	: C ₂₁ H ₂₆ O ₅
Molecular Weight	: 358.43
Source	: <i>Penicillium</i> sp.
Appearance	: Orange to tan solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in methanol or DMSO

Application Notes

Monascin (monascoflavin) is a yellow-orange pigment isolated from the fungus, *Monascus purpureus* used to produce red yeast rice. The structure of monascin was elucidated in 1960. Monascin has a broad bioprofile, including anti-inflammatory, antioxidant, antidiabetic, immunomodulatory, neuroprotective and antitumor effects. Monascin is a PPAR-γ agonist and attenuates proinflammatory mediators, including inducible nitric oxide synthase (iNOS) and cyclooxygenase-2 (COX-2) expression as well as nitric oxide (NO) and prostaglandin E(2) (PGE2) formation caused by ovalbumin-induced inflammation in the human THP-1 monocyte cell line. Monascin inhibits the skin tumor-initiating effects of peroxyntirite or UVB and the tumor-promoting effects of 12-O-tetradecanoylphorbol-13-acetate in a mouse model.

References

1. Monascoflavin. Ohashi M. et al. Bull Chem Soc Jpn. 1960, 33, 1630.
2. Monascus-fermented metabolite monascin suppresses inflammation via PPAR-γ regulation and JNK inactivation in THP-1 monocytes. Hsu W-H. et al. Food Chem Toxicol. 2012, 50, 1178.
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4. Alleviation of metabolic syndrome by monascin and ankaflavin: the perspective of *Monascus* functional foods. Lin C-H. et al. Food Funct. 2017, 8, 2102.