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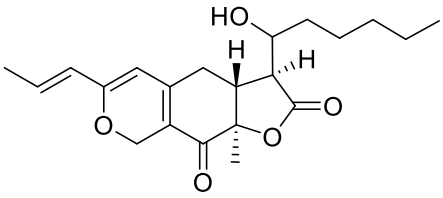
PRODUCT DATA SHEET

Monascinol

Code No.: **BIA-M2539**

Pack sizes: **0.1 mg, 0.5 mg**



Synonyms : Monascuspiloin

Specifications

CAS #	:	**1011244-19-1**
Molecular Formula	:	**$C_{21}H_{28}O_5$**
Molecular Weight	:	**360.44**
Source	:	***Penicillium* sp.**
Appearance	:	**Orange solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in methanol or DMSO**

Application Notes

Monascinol is a yellow-orange pigment isolated from the fungus Monascus purpureus used to produce red yeast ric . Monascinol increases the efficacy of irradiation in PC-3 prostate cancer cells, enhancing DNA damage and endoplasmic reticulum stress. Monascinol induces autophagy and cell death primarily via inhibition of the Akt/mTOR signaling pathways. Monascinol is a moderately potent inhibitor of HMG-CoA reductase. Monascinol has potent anti-androgen activity.

References

1. Monascuspiloin enhances the radiation sensitivity of human prostate cancer cells by stimulating endoplasmic reticulum stress and inducing autophagy. Chiu H-W. et al. PLoS One 2012, 7:e40462.
2. HMG-CoA reductase inhibitors from monascus-fermented rice. Li X et al. J Chem. 2013, 872056:1.
3. Screening of azaphilone derivatives from Monascus pilosus-fermented rice (red yeast rice) and their evaluation as nonsteroidal androgen receptor antagonists. Wu M-D. et al. Nat Prod Commun. 2019, 14, 1.

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