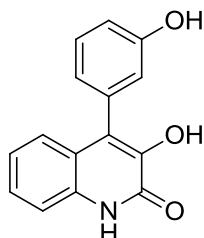


Viridicatol

Code No.: **BIA-V1681**

Pack sizes: **1 mg, 5 mg**



Synonyms :

Specifications

CAS #	: 14484-44-7
Molecular Formula	: C ₁₅ H ₁₁ NO ₃
Molecular Weight	: 253.3
Source	: Undescribed fungus
Appearance	: White to off-white solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Viridicatol is a polar metabolite first isolated from *Penicillium cyclopium* and *P. viridicatum* by Birkinshaw and collaborators in 1963. Viridicatol is a 2,3-dihydroxyquinoline which, like its analogue viridicatin, exists in equilibrium with its keto-tautomer. Viridicatol acts as an anti-inflammatory agent by suppressing the expression of pro-inflammatory mediators such as inducible nitric oxide synthase (iNOS) and cyclooxygenase (COX)-2, via inhibition of the nuclear factor-kappa B (NF-κB) pathway in LPS stimulated cells. Further, viridicatol is a selective inhibitor of PTP1B, a potential drug target for the treatment of type 2 diabetes and obesity.

References

1. Studies in the biochemistry of micro-organisms. 114. Viridicatol and cyclopienol, metabolites of *Penicillium viridicatum* Westling and *Penicillium cyclopium* Westling. Birkinshaw J.H. et al., *Biochem J.* 1963, 89, 196.
2. Production of secondary metabolites by some terverticillate penicillia on carbohydrate-rich and meat substrates. Nunez. F. et al., *J. Food Protect.* 2007, 70, 2829.
3. PTP1B inhibitory secondary metabolites from marine-derived fungal strains *Penicillium* spp. and *Eurotium* sp. Sohn J.H. et al., *J. Microbiol. Biotech.* 2013, 23, 1206.
4. Viridicatol from marine-derived fungal strain *Penicillium* sp. SF-5295 exerts anti-inflammatory effects through Inhibiting NF-κB signaling pathway on lipopolysaccharide-induced RAW264.7 and BV2 cells. Ko W. et al., *Nat. Prod. Sci.* 2015, 21, 240.