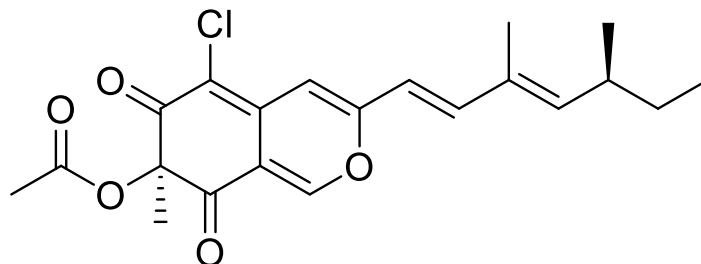


Sclerotiorin

Code No.: **BIA-S2941**

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



Synonyms : (+)-Sclerotiorin

Specifications

CAS #	: 549-23-5
Molecular Formula	: C ₂₁ H ₂₃ ClO ₅
Molecular Weight	: 390.9
Source	: <i>Penicillium</i> sp.
Appearance	: Yellow solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Sclerotiorin is an unusual azaphilone pigment first isolated from *Penicillium sclerotiorum* by MacCurtin and Reilly, University of Cork, Ireland in 1940. Sclerotiorin has broad biological activity and is a potent aldose reductase (IC₅₀ 0.4 μM) and lipoxygenase (IC₅₀ 4.2 μM) inhibitor and radical scavenger. Sclerotiorin induces apoptosis in colon cancer (HCT-116) cells through the activation of BAX, and down-regulation of BCL-2. Sclerotiorin has antifungal and antibacterial activity.

References

1. Sclerotiorine, a chlorinated metabolic product of *Penicillium sclerotiorum* van Beyma. MacCurtin T.P. & Reilly J. *Nature* 1940, 7, 335.
2. Sclerotiorin, from *Penicillium frequentans*, a potent inhibitor of aldose reductase. Chidananda C. et al. *Biotech Lett* 2006, 28, 1633.
3. Sclerotiorin, a novel inhibitor of lipoxygenase from *Penicillium frequentans*. Chidananda C. & Sattur A.P. *J Ag Food Chem* 2007, 55, 2879.
4. Anticancer activity of sclerotiorin, isolated from an endophytic fungus *Cephalotheca faveolata* Yaguchi, Nishim. & Udagawa. Giridharan P. et al. *Indian J Exper Biol* 2012, 50, 464.
5. Preparation, structure, and potent antifouling activity of sclerotioramine derivatives. Wei M-Y. et al. *Mar Biotech* 2017, 19, 372.