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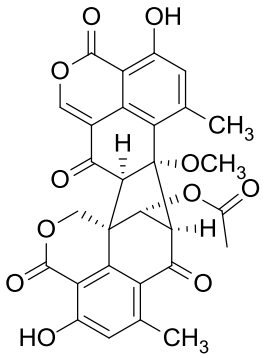
PRODUCT DATA SHEET

Duclauxin

Code No.: **BIA-D1667**

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



Synonyms : NSC 258308

Specifications

CAS #	:	**1732-37-2**
Molecular Formula	:	**$C_{29}H_{22}O_{11}$**
Molecular Weight	:	**546.5**
Source	:	***Aspergillus* sp.**
Appearance	:	**Off-white solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in ethanol, methanol, DMF or DMSO.**

Application Notes

Duclauxin is a dimeric oxaphenalenone isolated from Penicillium duclauxii by researchers at Tokyo University in 1965. The structure of duclauxin was determined by X-ray crystallography of bromoduclauxin. Duclauxin inhibits mammalian tumor cell line growth and appears to act as a potent uncoupler of oxidative phosphorylation. Duclauxin is a useful standard for chemotaxonomy of Penicillium and Talaromyces species.

References

1. Duclauxin, a metabolite of Penicillium duclauxi (Delacroix). Shibata S. et al., Tet. Lett. 1965, 6, 1287.
2. The crystal and molecular structure of monobromoduclauxin. Ogihara Y. et al., Acta Crystallogr. Sect. B: Struct. Crystallogr. Cryst. Chem. 1968, 24, 1037.
3. In vitro effect of duclauxin and derivatives of coumarin on nucleic acid and protein synthesis in Ehrlich's ascites carcinoma cells. Fusakova A. et al., Pharmazie 1977, 32, 291.
4. Inhibition of mitochondrial functions by the antibiotics bikaverin and duclauxine. Kovac L. et al., J. Antibiot. 1978, 31, 616.
5. Dereplication of microbial natural products by LC-DAD-TOFMS. Nielsen K.F. et al., J. Nat. Prod. 2011, 74, 2338.

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