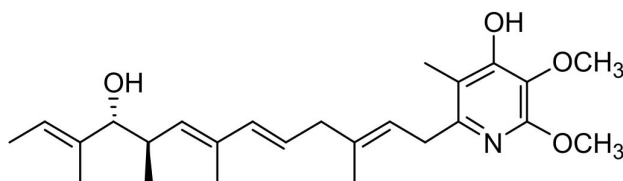


Piericidin A

Code No.: BIA-P1069

Pack sizes.: 1mg, 5mg



Synonyms:

Shaoguanmycin B, MT 1882-I, SN 198E, IT 143D, Piericidin A1

Specifications

CAS #	: 2738-64-9
Molecular Formula	: C25H37NO4
Molecular Weight	: 415.6
Source	: -
Appearance	: Pale Yellow Oil
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

Application Notes

Piericidin A is the major analogue of a family of pyridyl antibiotics isolated from selected *Streptomyces* species. It is a specific, potent inhibitor of NADH-ubiquinone oxidoreductase (Complex I) that binds to ubiquinone binding site(s). Piericidin A inhibits both mitochondrial and bacterial NADH-ubiquinone oxidoreductases, binding close to NUOD-NUOB interface.

References

1. Evidence for a quinone binding site close to the interface between NUOD and NUOB subunits of Complex I. Prieur I. et al., *Biochim. Biophys. Acta* 2001, 1504, 173.
2. $\rightarrow H^+/2e^-$ stoichiometry in NADH-quinone reductase reactions catalyzed by bovine heart submitochondrial particles. Galkin A.S. et al., *FEBS Lett.* 1999, 451, 157.
3. The 49-kDa subunit of NADH-ubiquinone oxidoreductase (Complex I) is involved in the binding of piericidin and rotenone, two quinone-related inhibitors. Darrouzet E. et al., *FEBS Lett.* 1998, 10, 34.