Product Name: Piericidin A
Product Number: P081
CAS Number: 2738-64-9
Molecular Formula: C_{25}H_{37}NO_{4}
Molecular Weight: 415.6
Appearance: Pale Yellow Oil
Storage Conditions: -20°C

Description: Piericidin A is the major analogue of a family of pyridyl antibiotics isolated from selected Streptomyces species.

Piericidin A is soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

Mechanism of Action: Piericidin A 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:
- 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.