

Catalog	Unit
TBI3467-200UG	200 ug
TBI3467-1MG	1 mg

Product Details

Formal Name: 2-(10-hydroxy-3,7,9,11-tetramethyl-2,4,7,11-tridecatetraenyl)-5,6-dimethoxy-3-methyl-4-pyridinol

Alternate Names: Piericidin A1; Shaoguanmycin B; SN 198E; AR-054

Molecular Formula: C₂₆H₃₇NO₄

Formula Weight: 415.60

CAS Number: 2738-64-9

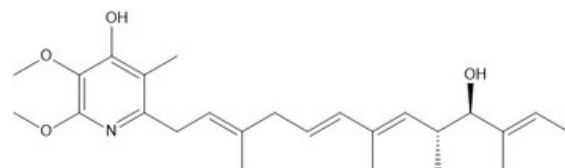
Purity: >95%

Formulation: powder

Solubility: Soluble in DMSO (up to 25 mg/ml) or in Ethanol (up to 20 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

Mitochondrial complex I inhibitor; CoQ10 analog

Functions

A potent inhibitor of the mitochondrial and bacterial type I NADH-ubiquinone oxidoreductase (complex I). Piericidin A is a ubiquinone analog which binds to the ubiquinone binding site of the enzyme. It is an extremely useful tool for exploring the role of complex I in mitochondrial function in both normal and pathophysiology. Prevents upregulation of GRP78 and induces cell death in glucose-deprived, etoposide-resistant HT-29 cells (IC₅₀=7.7 nM).

Application Procedures

First dissolved in DMSO (up to 25 mg/ml) or in Ethanol (up to 20 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or Ethanol may be stored at -20°C for up to 1 month.

For research use only.