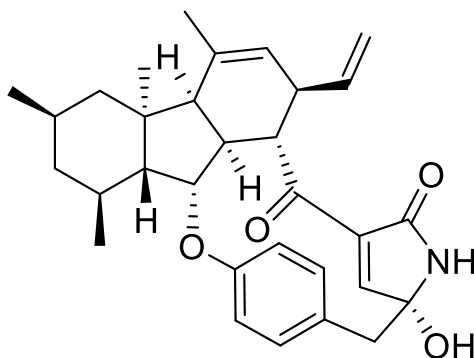


Pyrrocidine A

Code No.: **BIA-P2932**

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



Synonyms :

Specifications

| | |
|-------------------|---|
| CAS # | : 428439-24-1 |
| Molecular Formula | : C₃₁H₃₇NO₄ |
| Molecular Weight | : 487.6 |
| Source | : Unidentified marine fungus |
| Appearance | : Yellow solid |
| Purity | : >95% by HPLC |
| Long Term Storage | : -20°C |
| Solubility | : Soluble in ethanol, methanol, DMF or DMSO. |

Application Notes

Pyrrocidine A is a rare 13-membered macrocyclic antibiotic produced by an unidentified fungus, LL-Cyan426, by Carter and co-workers at Wyeth-Ayerst in 2002. In 2008 Wicklow and Poling, USDA, subsequently identified the same metabolite from the plant pathogen *Acremonium zeae*. Pyrrocidine A is active against Gram positive bacteria and yeast. Pyrrocidines A and B are potently active against fungi infesting cereal crops, including *Fusarium graminearum*, *Nigrospora oryzae*, *Stenocarpella* (*Diplodia*) *maydis*, *Rhizoctonia zeae* and *Clavibacter michiganense* subsp. *nebraskense*, the causal agent of Goss's bacterial wilt of maize. Pyrrocidines A and B have been identified as key active principals of *Acremonium zeae*, a protective endophyte of maize. Pyrrocidines A and B are also inducers of apoptosis in HL-60 cells.

References

1. Pyrrocidines A and B, new antibiotics produced by a filamentous fungus. He H. et al. *Tetrahedron Lett* 2002, 43, 1633.
2. *Acremonium zeae*, a protective endophyte of maize, produces dihydroresorcyllide and 7-hydroxydihydroresorcyllides. Poling S.M. et al. *J Ag Food Chem* 2008, 56, 3006.
3. Pyrrospirones A and B, apoptosis inducers in HL-60 cells, from an endophytic fungus, *Neonectria ramulariae* Wollenw KS-246. Yoshihito S. et al. *Bioorg Med Chem Lett* 2008, 18, 6050.