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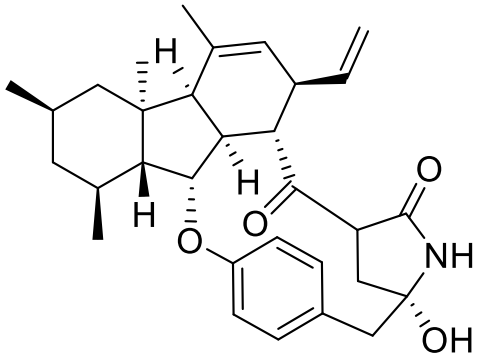
fine chemicals

PRODUCT DATA SHEET

Pyrrocidine B

Code No.: **BIA-P2933**

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



Synonyms :

Specifications

CAS #	:	**428439-25-2**
Molecular Formula	:	**$C_{31}H_{39}NO_4$**
Molecular Weight	:	**489.7**
Source	:	**Unidentified fungus**
Appearance	:	**Tan solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in ethanol, methanol, DMF or DMSO.**

Application Notes

Pyrrocidine B 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 B is active against Gram positive bacteria and yeast, albeit less potent than pyrrocidine A. 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 dihydroresorcylide and 7-hydroxydihydroresorcylides. 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.

Updated: 1 April 2022

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