

PF1163A

## PRODUCT DATA SHEET

Code No.: BIA-P1703

Pack sizes.: 0.5mg, 2.5mg

Synonyms:

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## **Specifications**

CAS # : 258871-59-9
Molecular Formula : C27H43NO6

Molecular Weight : 477.63

Source :-

Appearance : Brown oil

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO.

## **Application Notes**

PF1163A is an unusual 13-membered depsipeptide isolated from an undescribed species of Pencillium by researchers at Meiji Seika Kaisha and reported in 2000 as an antifungal active. The macrocycle of PF1163A comprises a modified N-methyltyrosine conjugated with a 9-hydroxytetradecanoic acid. The total synthesis and absolute stereochemistry were reported in 2014. PF1163A is a selective antifungal agent with low mammalian toxicity. PF1163A acts on ergosterol biosynthesis, inhibiting C-4 sterol methyl oxidase, and acts synergistically with fluconazole against azole resistant Candida albicans.

## References

- 1. PF1163A and B, new antifungal antibiotics produced by Penicillium sp. I. Taxonomy of producing strain, fermentation, isolation and biological activities. Hiroshi N. et al., J. Antibiot. 2000, 53, 33.
- 2. PF1163A and B, new antifungal antibiotics produced by Penicillium sp. Part II. Physico-chemical properties and structure elucidation. Sasaki T. et al., J. Antibiot. 2000, 53, 38.
- 3. PF1163A, a novel antifungal agent, inhibits ergosterol biosynthesis at C-4 sterol methyl oxidase. Nose H. et

- al., J. Antibiot. 2002, 55, 969.
- 4. Macrolides from a marine-derived fungus, Penicillium meleagrinum var. viridiflavum, showing synergistic effects with fluconazole against azole-resistant Candida albicans. Okabe M., J. Nat. Prod. 2016, 79, 1208.