

PRODUCT DATA SHEET

Code No.: BIA-E1555

Pack sizes: 0.5 mg, 2.5 mg

Enopeptin A

Synonyms : Enopeptin II, BRN 5373924, NSC657143

Specifications

CAS # : 139601-96-0

Molecular Formula : C₄₇H₅₇N₇O₁₁

Molecular Weight : 896.0

Source : Streptomyces sp.

Appearance : Yellow solid
Purity : >95% by HPLC

Long Term Storage : -20°C

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

Application Notes

Enopeptin A is an unusual depsipeptide featuring a pentaenone side chain, reported as an antiviral by researchers at RIKEN in 1991. Enopeptin A has potent antibacterial activity against Gram positive and Gram negative bacteria, including MRSA. Enopeptin A is the most non-polar of the acyldepsipeptide (ADEP) antibiotics which include the recently rediscovered compounds, A54556 A and B, that act by activating and disregulating Clp-family proteins.

References

- 1. The structure of enopeptins A and B, novel depsipeptide antibiotics. Koshino H. et al., Tetrahedron Letters 1991, 32, 7707.
- 2. Enopeptin A, a novel depsipeptide antibiotic with anti-bacteriophage activity. Osada H. et al., J. Antibiot. 1991, 44, 1436.
- 3. Structures of ClpP in complex with acyldepsipeptide antibiotics reveal its activation mechanism. Lee B-G. et al., Nature Struct. Mol. Biol. 2010, 17, 471.
- 4. Medicinal chemistry optimization of acyldepsipeptides of the enopeptin class antibiotics. Hinzen B. et al., Chem. Med. Chem. 2006, 1, 689.

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