

PRODUCT DATA SHEET

Code No.: BIA-N1325

Pack sizes: 1 mg, 5 mg

Synonyms: Nargenicin A1, CP47444, U39760

Specifications

Nargenicin

CAS # : 70695-02-2 Molecular Formula : $C_{28}H_{37}NO_8$ Molecular Weight : 515.6

Source : Nocardia argentinensis

Appearance : White solid

Purity : >95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Nargenicin (CP-47,444) is a 10-membered macrocyclic lactone isolated from Nocardia in 1980 as an antibiotic. The macrocyclic lactone is anchored through vicinal carbons to a decalin bearing a pyrrole ester. Nargenicin exhibits potent activity against Gram positive bacteria, in particular MRSA strains. More recently, nargenicin has been shown to enhance retinoate-induced cell differentiation.

References

- 1. Structure of natural antibiotic CP-47,444. Celmer W.D. et al., J. Am. Chem. Soc. 1980, 102, 1203.
- 2. Production, isolation and biological activity of nargenicin from Nocardia sp. CS682. Sohng J.K. et al., Arch Pharm Res 2008, 31, 1339.
- 3. Nargenicin enhances dihydroxyvitamin D-3 and all-trans retinoic acid-induced leukemia cell differentiation via PKC beta I/MAPK pathways. Kim S.H. et al., Biochem. Pharmacol. 2009, 77, 1694.

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