

## PRODUCT DATA SHEET

Nargenicin Code: BIA-N1325

Pack sizes: 1 mg, 5 mg

Synonyms: Nargenicin B1, CP 51467. Antibiotic CP 51467

## Specifications

CAS # : 75923-01-2 Molecular Formula :  $C_{29}H_{39}NO_{10}$ 

Molecular Weight : 561.6

Source : Nocardia argentinensis

Appearance : White solid

Purity : **>99%** 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.