

## Cispentacin

## Chemical Properties

|                   |                                                                                                                     |
|-------------------|---------------------------------------------------------------------------------------------------------------------|
| CAS No. :         | 122672-46-2                                                                                                         |
| Formula:          | C <sub>6</sub> H <sub>11</sub> NO <sub>2</sub>                                                                      |
| Molecular Weight: | 129.16                                                                                                              |
| Storage:          | Powder: -20°C for 3 years   In solvent: -80°C for 1 year<br>Actual storage temperature shall be subject to the COA. |

## Biological Description

|               |                                                                                                                                   |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Description   | Cispentacin is a $\beta$ -amino acid and acts as a water-soluble antifungal antibiotic. Cispentacin is effective against Candida. |
| Targets(IC50) | Others                                                                                                                            |

## Preparing Stock Solutions

|       | 1mg       | 5mg        | 10mg       |
|-------|-----------|------------|------------|
| 1 mM  | 7.7423 mL | 38.7117 mL | 77.4234 mL |
| 5 mM  | 1.5485 mL | 7.7423 mL  | 15.4847 mL |
| 10 mM | 0.7742 mL | 3.8712 mL  | 7.7423 mL  |
| 50 mM | 0.1548 mL | 0.7742 mL  | 1.5485 mL  |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

## Reference

- Nonn M, Kiss L, Hänninen MM, Sillanpää R, Fülöp F. Synthesis of highly functionalized fluorinated cispentacin derivatives. *Chem Biodivers*. 2012 Nov;9(11):2571-81. doi: 10.1002/cbdv.201200323. PubMed PMID: 23161635.
- Bunnage ME, Davies SG, Parkin RM, Roberts PM, Smith AD, Withey JM. Kinetic resolution of tert-butyl (RS)-3-alkylcyclopentene-1-carboxylates for the synthesis of homochiral 3-alkyl-cispentacin and 3-alkyl-transpentacin derivatives. *Org Biomol Chem*. 2004 Nov 21;2(22):3337-54. Epub 2004 Oct 20. PubMed PMID: 15534712.
- Konishi M, Nishio M, Saitoh K, Miyaki T, Oki T, Kawaguchi H. Cispentacin, a new antifungal antibiotic. I. Production, isolation, physico-chemical properties and structure. *J Antibiot (Tokyo)*. 1989 Dec;42(12):1749-55. PubMed PMID: 2516082.
- Capobianco JO, Zakula D, Coen ML, Goldman RC. Anti-Candida activity of cispentacin: the active transport by amino acid permeases and possible mechanisms of action. *Biochem Biophys Res Commun*. 1993 Feb 15;190(3):1037-44. PubMed PMID: 8439305.

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