

Thiocillin I

## PRODUCT DATA SHEET

Code No.: BIA-T1529

Pack sizes.: 0.5mg, 2.5mg

Synonyms:

44-O-Demethylthiocillin II

## **Specifications**

CAS # : 59979-01-0

Molecular Formula : C48H49N13O10S6

Molecular Weight : 1160.4

Source :-

Appearance : White to light tan solid

Purity : >95% by HPLC

Long Term Storage : -20°C

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

## **Application Notes**

Thiocillin I is the simplest of the macrocyclic thiazole peptides, first isolated from Bacillus badius. The final structural assignment and total synthesis of thiocillin I was only completed in 2011. Thiocillin I was originally reported as a potent antibacterial but its biological activity has not been extensively investigated.

## References

- 1. Isolation of three new antibiotics, thiocillin I, II and III, related to Micrococcin P. (Studies on antibiotics from the genus Bacillus VIII). Shoji J. et al., J. Antibiot. 1976, 29, 366.
- 2. Structural studies on thiocillins I, II and III (Studies on antibiotics from the genus Bacillus XXIX). Shoji J. et al., J. Antibiot. 1981, 34, 1126.
- 3. Total synthesis and complete structural assignment of Thiocillin I. Aulakh S. & Ciufolini M.A. J. Am. Chem. Soc. 2011, 133, 5900.