

## PRODUCT DATA SHEET

Code No.: BIA-T1321

Pack sizes: 25 mg, 100 mg

Synonyms :

## Specifications

**Tiamulin** 

CAS # : **55297-95-5**Molecular Formula : **C**<sub>28</sub>**H**<sub>47</sub>**NO**<sub>4</sub>**S** 

Molecular Weight : 493.7

Source : Semi-synthetic
Appearance : Evaporated resin
Purity : >98% by HPLC

Long Term Storage : -20°C

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

## **Application Notes**

Tiamulin is a semi–synthetic analogue of pleuromutilin in which the hydroxyacetyl side chain is replaced with a larger diethylaminoethylthioacetyl moiety, providing greater hydrophobicity and an ionisable group for salt formation and greater water solubility. Tiamulin is a potent and highly selective antibiotic active against a range of Gram positive bacteria, with no cross resistance to existing antibiotic classes due to its unique mode of action. Like pleuromutilin, it inhibits protein synthesis by binding to domain V of 23S rRNA.

## References

 New pleuromutilin derivative with enhanced antimicrobial activity. I. Synthesis. Egger H. & Reinshagen H. J. Antibiot. 1976, 29, 915.

2. Pleuromutilin antibiotics. Hunt E. Drugs Future 2000, 25, 1163.

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