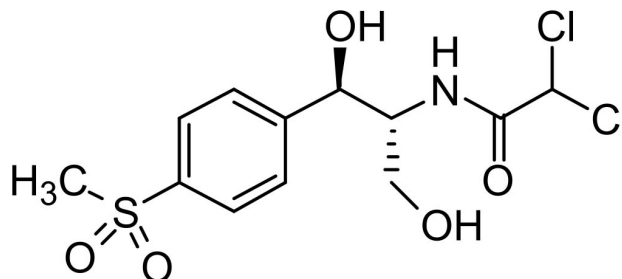


Thiamphenicol

Pack sizes.: 25mg, 100mg



Synonyms:

Thiocymetin, Thiophenicol, Win 5062-2, NSC 522822

Specifications

CAS #	: 15318-45-3
Molecular Formula	: C₁₂H₁₅Cl₂NO₅
Molecular Weight	: 356.2
Source	: -
Appearance	: White solid
Purity	: >99% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Poor water solubility.

Application Notes

Thiamphenicol is a semi-synthetic chloramphenicol prepared by total synthesis from thiophenol in which the nitro moiety of chloramphenicol is replaced by a methylsulphone, first synthesised at Sterling Winthrop in 1952.

Thiamphenicol is a broad spectrum antibiotic with good activity against Gram negative and anaerobic bacteria.

Thiamphenicol acts by binding to the 23S sub-unit of the 50S ribosome inhibiting protein synthesis. Thiamphenicol has been extensively studied with over 800 literature citations.

References

1. New antibacterial agents. 2-Acylamino-1-(4-hydrocarbonylsulfonylphenyl)-1,3-propanediols and related compounds. Culter R.A. et al., J. Am. Chem. Soc. 1952, 74, 5475.
2. New antibacterial agents. II. An alternate synthesis of dl-threo-2-dichloro-acetamido-1-(4-methylsulfonylphenyl)-1,3-propanediol. Suiter C.M. et al., J. Am. Chem. Soc. 1953, 75, 4330.
3. In vitro activity of chloramphenicol and thiamphenicol analogs. Neu H.C. & Fu K.P. Antimicrob. Agents Chemother. 1980, 18, 311.