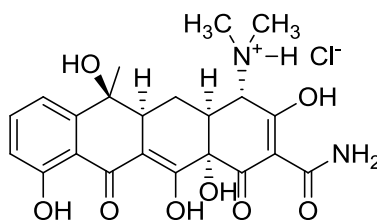


Tetracycline hydrochloride

Code No.: **BIA-T1505**

Pack sizes: **5 mg, 25 mg**



Synonyms : Achromycin, (-)-Tetracycline hydrochloride, Economycin, Neocycline B, Hostacyclin

Specifications

CAS #	: 64-75-5
Molecular Formula	: C₂₂H₂₅ClN₂O₈
Molecular Weight	: 480.9
Source	: <i>Streptomyces</i> sp.
Appearance	: Yellow to orange solid
Purity	: >99% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Good water solubility.

Application Notes

Tetracycline hydrochloride is a salt prepared from tetracycline taking advantage of the basic dimethylamino group which protonates and readily forms the salt in hydrochloric acid solutions. The hydrochloride is the preferred formulation for pharmaceutical applications. Tetracycline hydrochloride has broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal sub-units blocking protein synthesis.

References

1. Tetracycline. Conover L. 1955 US Patent 2,699,054.
2. Anhydrotetracycline is a major product of tetracycline photolysis. Hasan T.J. et al. Org. Chem. 1985, 50, 1755.
3. Kinetics of concomitant degradation of tetracycline to epitetracycline, anhydrotetracycline, and epianhydrotetracycline in acid phosphate solution. Yuen P.H. & Sokoloski T.D.J. Pharm. Sci. 1977, 66, 1648.

Updated: 2 December 2014