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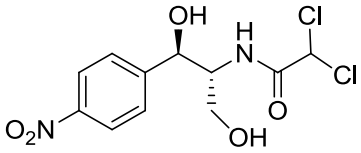
PRODUCT DATA SHEET

Chloramphenicol

Code No.: **BIA-C1474**

Pack sizes: **25 mg, 100 mg**



Synonyms : Chlorcetin, Chlorocidin, Chloromycetin, NSC 3069 NCI C 55709, I 337A

Specifications

CAS #	:	**56-75-7**
Molecular Formula	:	**$C_{11}H_{12}Cl_2N_2O_5$**
Molecular Weight	:	**323.1**
Source	:	***Streptomyces* sp.**
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

Chloramphenicol is unusual nitroaromatic metabolite produced by Streptomyces venezuelae, first published in 1947. Chloramphenicol is a broad spectrum antibiotic with good activity against Gram negative and anaerobic bacteria. Although restricted to ocular use, antibiotic resistance to other classes has refocused attention on this class. Chloramphenicol acts by binding to the 23S sub-unit of the 50S ribosome, inhibiting protein synthesis. Chloramphenicol has been extensively studied with over 35,000 literature citations.

References

1. Chloromycetin, a new antibiotic from a soil actinomycete. Ehrlich J. et al. Science 1947, 106, 417.
2. Chloromycetin and streptothricin. Carter H.E. et al. Science 1948, 107, 113.
3. Streptomyces venezuelae, n. sp., the source of chloromycetin. Ehrlich J. & Gottlieb D.J. Bacteriol. 1948, 56, 467.
4. In vitro activity of chloramphenicol and thiamphenicol analogs. Neu H.C. & Fu K.P. Antimicrob. Agents Chemother. 1980, 18, 311.

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