

Demeclocycline

PRODUCT DATA SHEET

Code No.: BIA-D1462

Pack sizes: 5 mg, 25 mg

Synonyms: 6-Demethylchlotetracycline, DMCT, 7-Chloro-6-demethyltetracycline, Ledermycin, RP

10192

Specifications

CAS # : **127-33-3**

Molecular Formula : $C_{21}H_{21}CIN_2O_8$

Molecular Weight : 468.9

Source : Streptomyces sp.

Appearance : Yellow to orange solid

Purity : >98% by HPLC

Long Term Storage : -20°C

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

Application Notes

Demeclocycline, a chlortetracycline analogue produced by a mutagenised strain of Streptomyces aureofaciens, was first isolated in 1957. Like all tetracyclines, demeclocycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal subunits, blocking protein synthesis. Demeclocycline has been extensively cited in the literature with over 800 references relating almost exclusively to in vivo use.

References

- 1. A new family of antibiotics: the demethyltetracyclines. McCormack J.R.D. et al. J. Am. Chem. Soc. 1957, 79, 4561.
- 2. Structure-activity relationships in the tetracycline series. Blackwood R.K. & English A.R. In Structure-activity relationships among the semisynthetic antibiotics. (Ed. Perlman D. Academic Press, London) 1977, 397.

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