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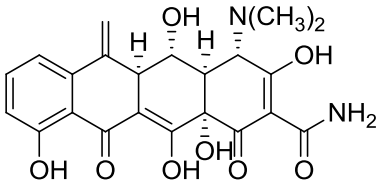
PRODUCT DATA SHEET

Methacycline

Code No.: **BIA-M1467**

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



Synonyms : 6-Methyleneoxytetracycline, Metacycline, Rondomycin

Specifications

CAS #	:	**914-00-1**
Molecular Formula	:	**$C_{22}H_{22}N_2O_8$**
Molecular Weight	:	**442.4**
Source	:	**Semi-synthetic**
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

Methacycline is a semi-synthetic tetracycline prepared by dehydration of the 6-hydroxy group of oxytetracycline to yield an exocyclic 6-methylene. Like all tetracyclines, methacycline shows broad spectrum antibacterial and antiprotozoan activity and acts by binding to the 30S and 50S ribosomal subunits, blocking protein synthesis. Methacycline has been extensively cited in the literature with over 400 references.

References

1. 6-Methylenetetracyclines. I A new class of tetracycline antibiotics. Blackwood R.K. et al. J. Am. Chem. Soc. 1961, 83, 2773.
2. 6-Methylenetetracyclines. III. Preparation and Properties. Blackwood R.K. et al. J. Am. Chem. Soc. 1963, 85, 3943.
3. A comparison of the in vitro and in vivo activity of methacycline and other tetracycline compounds. Chang T.W. & Weinstein L. Antibiot. Chemother. 1962, 12, 676.
4. Evaluation of methacycline, a new analogue of oxytetracycline. Limson B.M. & Guevara R. Curr. Ther. Res. Clin. Exp. 1963, 5, 249.

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