

PRODUCT DATA SHEET

Code No.: BIA-C1313

Pack sizes: 5 mg, 25 mg

Clarithromycin

Synonyms : 6-O-Methylerythromycin A

Specifications

CAS # : **81103-11-9**Molecular Formula : **C**₃₈**H**₆₉**NO**₁₃

Molecular Weight : 748

Source : Semi-synthetic
Appearance : White solid
Purity : >95% by HPLC

Long Term Storage : -20°C

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

Application Notes

Clarithromycin (6-methoxyerythromycin) is a macrolide antibiotic active against a broad range of Gram positive bacteria. Clarithromycin was designed to enhance acid stability and improve oral bioavailability compared with erythromycin which is highly unstable to acidic conditions, undergoing a series of internal ketalisations between the 9-keto moiety and alcohols at C6 and C11. Omura and colleagues found that protection of the labile 6-OH group by methylation provided a simple but elegant solution.

References

1. Chemical modification of erythromycins. I. Synthesis and antibacterial activity of 6-O-methylerythromycin A. Morimoto S. et al., J. Antibiot. 1984, 37, 187.

2. Macrolide antibiotics. Chemistry, biology and practice. Ed. Omura S. Academic Press 2002.

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