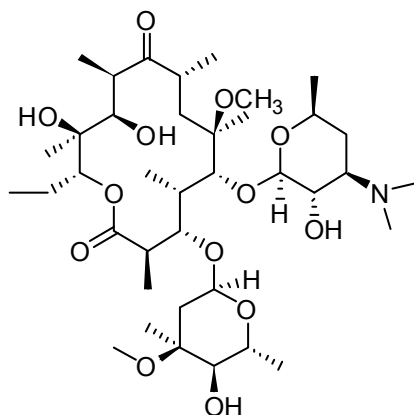


## Clarithromycin

Code: **BIA-C1313**

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



Synonyms : **6-O-methylerythromycin A**

## Specifications

CAS # : **81103-11-9**  
Molecular Formula : **C<sub>38</sub>H<sub>69</sub>NO<sub>13</sub>**  
Molecular Weight : **748.0**  
Source : **Semi-synthetic**  
Appearance : **White solid**  
Purity : **>98%**  
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**.