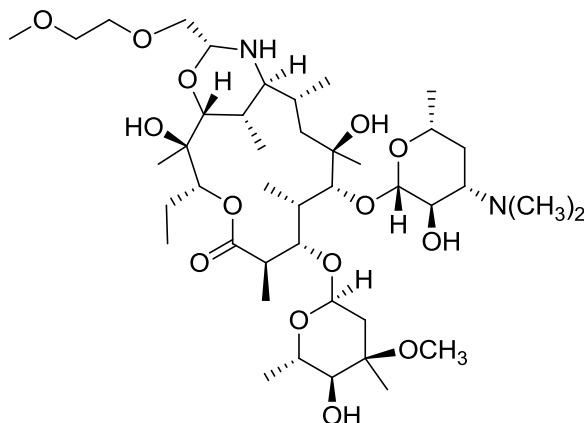


Dirithromycin

Code No.: **BIA-D1314**

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



Synonyms : LY-237216

Specifications

CAS #	: 62013-04-1
Molecular Formula	: C ₄₂ H ₇₈ N ₂ O ₁₄
Molecular Weight	: 835.1
Source	: Semi-synthetic
Appearance	: White solid
Purity	: >98% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Dirithromycin is a macrolide antibiotic pro-drug of 9S-erythromyclamine, a close analogue of erythromycin in which the 9-keto group is replaced with an amino group in the S-configuration. Although erythromyclamine overcomes the acid instability of erythromycin, it is poorly absorbed following oral administration. Dirithromycin is formed by reacting erythromyclamine with an aldehyde to form a Schiff base which undergoes cyclisation to an oxazine with the C11-alcohol. Dirithromycin provides higher tissue levels and prolonged in vivo half-life by slowly releasing erythromyclamine.

References

1. Synthesis and antimicrobial evaluation of dirithromycin (AS-E 136: LY237216), a new macrolide antibiotic derived from erythromycin. Counter F.T. et al., Antimicrob. Agents Chemother. 1991, 35, 1116.
2. Dirithromycin: Introduction and historical development. Kirst H.A. Drugs Today 1995, 31, 89.