Dirithromycin

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-erythromycylamine, a close analogue of erythromycin in which the 9-keto group is replaced with an amino group in the S-configuration. Although erythromycylamine overcomes the acid instability of erythromycin, it is poorly absorbed following oral administration. Dirithromycin is formed by reacting erythromycylamine 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 erythromycylamine.

References