

# Clarithromycin

## Catalog No: tcsc2576



### Available Sizes

**Size:** 100mg

**Size:** 200mg

**Size:** 500mg



### Specifications

**CAS No:**  
81103-11-9

**Formula:**  
 $C_{38}H_{69}NO_{13}$

**Pathway:**  
Anti-infection;Autophagy;Metabolic Enzyme/Protease

**Target:**  
Bacterial;Autophagy;Cytochrome P450

**Purity / Grade:**  
>98%

**Solubility:**  
DMSO :  $\geq 7.5$  mg/mL (10.03 mM)

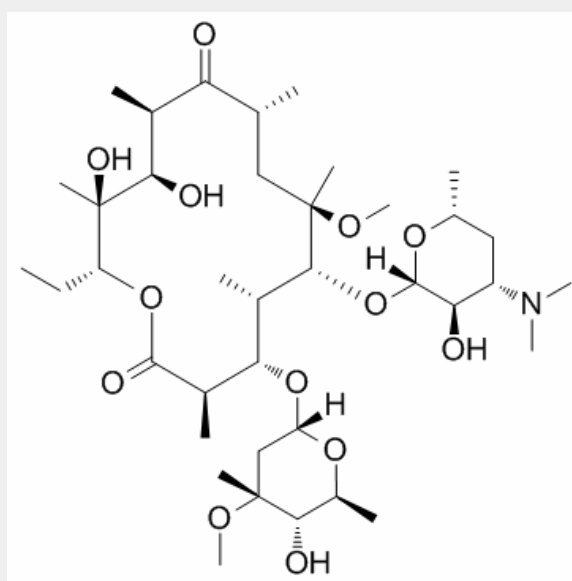
**Observed Molecular Weight:**  
747.95

### Product Description

Clarithromycin is a macrolide antibiotic and a CYP3A4 inhibitor.

Target: Antibacterial; CYP3A4

Clarithromycin is a macrolide antibiotic used to treat pharyngitis, tonsillitis, acute maxillary sinusitis, acute bacterial exacerbation of chronic bronchitis, pneumonia (especially atypical pneumonias associated with *Chlamydia pneumoniae*), skin and skin structure infections. Clarithromycin prevents bacteria from growing by interfering with their protein synthesis. It binds to the subunit 50S of the bacterial ribosome and thus inhibits the translation of peptides. Clarithromycin has similar antimicrobial spectrum as erythromycin, but is more effective against certain Gram-negative bacteria, particularly *Legionella pneumophila*. Besides this bacteriostatic effect, clarithromycin also has bactericidal effect on certain strains, such as *Haemophilus influenzae*, *Streptococcus pneumoniae* and *Neisseria gonorrhoeae*. Clarithromycin is a CYP3A4 inhibitor. Even low doses of the cytochrome P4503A4 (CYP3A4) inhibitor clarithromycin increase the plasma concentrations and effects of repaglinide. Concomitant use of clarithromycin or other potent inhibitors of CYP3A4 with repaglinide may enhance its blood glucose-lowering effect and increase the risk of hypoglycemia [1, 2].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!