

# Azithromycin

## Catalog No: tcsc2308



### Available Sizes

**Size:** 50mg

**Size:** 100mg

**Size:** 200mg

**Size:** 500mg



### Specifications

**CAS No:**

83905-01-5

**Formula:**

$C_{38}H_{72}N_2O_{12}$

**Pathway:**

Anti-infection;Autophagy

**Target:**

Bacterial;Autophagy

**Purity / Grade:**

>98%

**Solubility:**

DMSO :  $\geq 100$  mg/mL (133.51 mM); H<sub>2</sub>O :

**Alternative Names:**

CP 62993

**Observed Molecular Weight:**

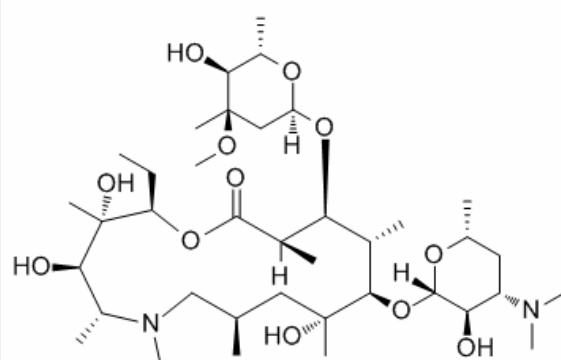
748.98

## Product Description

Azithromycin is a macrolide antibiotic useful for the treatment of a number of bacterial infections.

***In Vitro:*** Azithromycin (2  $\mu$ M) augments rhinovirus-induced IFN $\beta$  expression in primary bronchial epithelial cells from asthmatics, which is associated with over-expression of RIG-I like receptors and repression of viral replication. Knockdown of MDA5, but not knockdown of RIG-I, diminishes azithromycin (2  $\mu$ M)-enhanced viral-induced IFN $\beta$  expression in asthmatic primary bronchial epithelial cells<sup>[1]</sup>. Azithromycin specifically reduces MMP-9 mRNA and protein levels without affecting NF- $\kappa$ B in endotoxin-challenged monocytic THP-1 cells<sup>[2]</sup>.

***In Vivo:*** Azithromycin (50 mg/kg) has no effect on bronchoalveolar lavage inflammatory parameters and LDH levels in a mouse model of asthma exacerbation. Azithromycin induces neither general inflammatory parameters nor LDH release in a mouse model of asthma exacerbation, and augments expression of interferon-stimulated genes and the pattern recognition receptor MDA5 but not RIG-I in exacerbating mice<sup>[1]</sup>.



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