

# Azithromycin (hydrate)

Catalog No: tcsc2962



## Available Sizes

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

117772-70-0

**Formula:**

$C_{38}H_{76}N_2O_{14}$

**Pathway:**

Anti-infection;Autophagy

**Target:**

Bacterial;Autophagy

**Form:**

Powder White Solid

**Purity / Grade:**

99%

**Solubility:**

DMSO : 360 mg/mL (458.6 mM)

Water : Insoluable

**Storage Instruction:**

Powder : -20°C for 3 years In solvent : -80°C for 12 months

**Alternative Names:**

CP-62993 dihydrate

## Observed Molecular Weight:

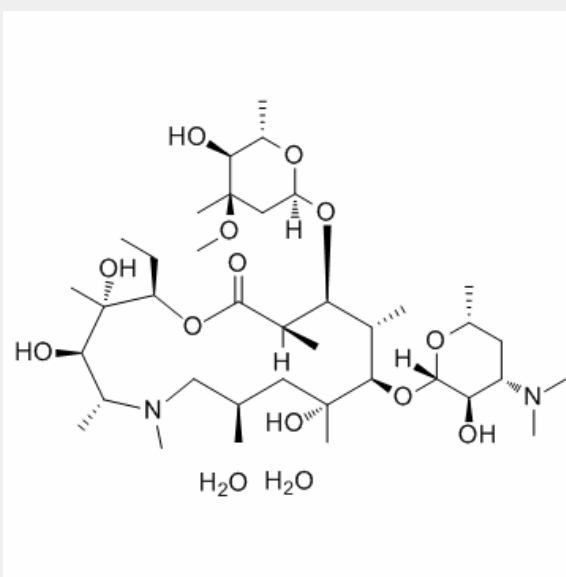
785.02

## Product Description

Azithromycin hydrate 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!