LKT Laboratories, Inc.

Azithromycin Dihydrate

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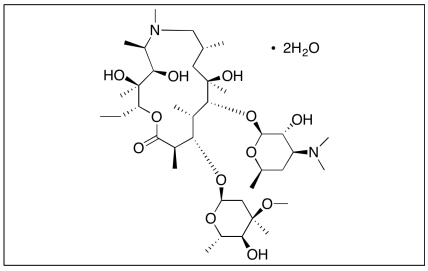
Product Information

Product ID A9834
CAS No. 117772-70-0
Chemical Name [2R-(2R*,3S*,4R*,5R*,8R*,10R*,11R*,12S*,13S*,- 14R*)]-13-[(2,6-Dideoxy -3-C-methyl-3-O-methyl-α- L-ribo-hexopyranosyl)oxy]-2-ethyl-3,4,10-trihydroxy-3,5,6,8,10,12,14-heptamethyl-11-[[3,4,6-trideoxy-3-
Synonym Azitrocin, Ribotrex, Sumamed, Zithromax, Zitromax



Formula $C_{38}H_{72}N_2O_{12} \cdot 2H_2O$
Formula Wt. 785.02
Melting Point 113-115°C
Purity ≥98%
Solubility Slightly soluble in water.
DMSO:100 mg/mL,
Ethanol:100 mg/mL.

Bulk quanitites available upon request

Product ID	Size
A9834	500 mg
A9834	1 g
A9834	5 g

Store Temp Ambient
Ship Temp Ambient

Description Azithromycin is an azalide macrolide antibiotic derived from erythromycin. Azithromycin binds the bacterial 50S ribosomal subunit, inhibiting protein translation. Azithromycin displays antibacterial, anti-fibrotic, and anti-inflammatory activities. In epithelial cells, azithromycin inhibits the epithelial-to-mesenchymal transition (EMT) by inhibiting expression of Smad3. Additionally, azithromycin inhibits production of arachidonic acid, eicosanoids, IL-6, and IL-12 in LPS-stimulated macrophages.

References

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Banerjee B, Musk M, Sutanto EN, et al. Regional differences in susceptibiity of bronchial epithelium to mesenchymal transition and inhibition by the macrolide antibiotic azithromycin. PLoS One. 2012;7(12):e52309. PMID: 23284981.

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Togami K, Chono S, Morimoto K. Distribution characteristics of clarithromycin and azithromycin, macrolide antimicrobial agents used for treatment of respiratory infections, in lung epithelial lining fluid and alveolar macrophages. Biopharm Drug Dispos. 2011 Oct;32(7):389-397. PMID: 21812004.