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


