

Azithromycin

Catalogue Number : 8390155

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Synonyms: Azitrocin, CP-62993, Sumamed, Zithromax

Chemical Name: (2R,3S,4R,5R,8R,10R,11R,12S,13S,14R)-11-[(2S,3R,4S,6R)-4-(dimethylamino)-3-hydroxy-6-methoxy-2-yl]oxy-2-ethyl-3,4,10-trihydroxy-13-[(2R,4R,5S,6S)-5-hydroxy-4-methoxy-4,6-dimethoxyloxy-2-yl]oxy-3,5,6,8,10,12,14-heptamethyl-1-oxa-6-azacyclopentadecan-15-one

Molecular Formula: C₃₈H₇₂N₂O₁₂

Molecular Weight: 749.0

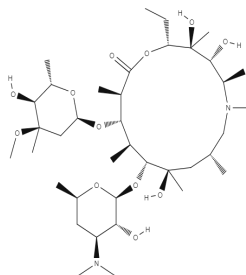
CAS Number: 83905-01-5

Purity: 98%

Applications: FA

Formulation: Crystalline solid

Storage: Product should be kept at -20°C.



Description

Azithromycin is an acid-stable macrolide antibiotic that inhibits protein synthesis by binding to the 50S subunit of the bacterial ribosome. It is reported to inhibit autophagy. It is currently being researched as a potential treatment for COVID-19.

Preparation & Storage

Soluble in organic solvents such as ethanol and DMSO. It is soluble in DMSO up to 5mg/ml.

References

- Peters, D. H., Friedel, H. A., McTavish, D. (1992). Azithromycin. *Drugs*, 44(5), 750-799.
- Qiao, X., Wang, X., Shang, Y., Li, Y., Chen, S. Z. (2018). Azithromycin enhances anticancer activity of TRAIL by inhibiting autophagy and up-regulating the protein levels of DR4/5 in colon cancer cells in vitro and in vivo. *Cancer Communications*, 38(1), 43.
- Gautret, P., Lagier, J. C., Parola, P., Meddeb, L., Mailhe, M., Doudier, B., ... Honor, S. (2020). Hydroxychloroquine and azithromycin as a treatment of COVID-19: results of an open-label non-randomized clinical trial. *International Journal of Antimicrobial Agents*, 105949.