Azithromycin
Item No. 15004

CAS Registry No.: 83905-01-5
Formal Name: (2R,3S,4R,5R,8R,10R,11R,12S,13S, 14R)-13-[(2,6-dideoxy-3-C-methyl-3-O- methyl-L-ribo-hexopyranosyl)oxy]-2- ethyl-3,4,10-trihydroxy-3,5,6,8,10,12,14- heptamethyl-11-[(3,4,6-trideoxy-3- (dimethylamino)-β-D-xylo-hexopyranosyl] oxy]-1-oxa-6-azacyclopentadecan-15-one
Synonyms: CP 62,993, Zithromax®
MF: C_{38}H_{72}N_{2}O_{12}
FW: 749.0
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid

Laboratory Procedures
For long term storage, we suggest that azithromycin be stored as supplied at -20°C. It should be stable for at least two years.
Azithromycin is supplied as a crystalline solid. A stock solution may be made by dissolving the azithromycin in the solvent of choice. Azithromycin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of azithromycin in DMSO is approximately 5 mg/ml and approximately 16 mg/ml in ethanol and DMF.
Azithromycin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, azithromycin should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Azithromycin has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol/PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.
Azithromycin is a macrolide antibiotic with high stability at acidic pH, long half-life, and favorable effectiveness against a range of organisms.1,2 In addition, it interferes poorly with the cytochrome P450 system, limiting side effects related to drug interactions.3 Azithromycin is effective, in combination with chloroquine, for protection against malaria.4

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/15004

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA
This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent to your institution.

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Cayman Chemical makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals heretofore. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

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