Roxithromycin
Item No. 19465

CAS Registry No.: 80214-83-1
Formal Name: 9E-[O-[(2-methoxyethoxy)methyl]oxime]-erythromycin
Synonyms: RU 965, RU 28965
MF: C_{41}H_{76}N_{2}O_{15}
FW: 837.1
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

Roxithromycin is supplied as a crystalline solid. A stock solution may be made by dissolving the roxithromycin in the solvent of choice. Roxithromycin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of roxithromycin in ethanol is approximately 30 mg/ml and approximately 15 mg/ml in DMSO and DMF.

Roxithromycin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, roxithromycin should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Roxithromycin 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.

Description

Roxithromycin is a semi-synthetic macrolide antibiotic in which the erythronolide A lactone ring has been altered to prevent inactivation in the gastric milieu.\(^1,2\) It is active against Gram-positive and Gram-negative cocci, Gram-positive bacilli, and some Gram-negative bacilli without significantly affecting the fecal flora.\(^2\) Roxithromycin is also effective in eradicating \textit{H. pylori}.\(^3\)

References