

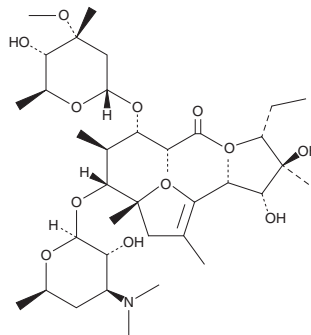
PRODUCT INFORMATION



Erythromycin A enol ether

Item No. 17191

CAS Registry No.: 33396-29-1
Formal Name: 8,9-didehydro-9-deoxo-6-deoxy-6,9-epoxy-erythromycin
Synonyms: BRL 46357ER, EM-201
MF: C₃₇H₆₅NO₁₂
FW: 715.9
Purity: ≥95%
UV/Vis.: λ_{max}: 209 nm
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

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

Erythromycin A enol ether is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, erythromycin A enol ether should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Erythromycin A enol ether 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

Erythromycin A enol ether is a decomposition product of the macrolide antibiotic, erythromycin A (Item No. 16486).¹ Erythromycin A enol ether does not retain the antibiotic properties of erythromycin A and has been identified as a β -turn mimic of the peptide hormone motilin, causing duodenal contractions and gastrointestinal distress.² This compound has been used to determine the binding characteristics of ligands of the motilin receptor.²

References

1. Pendela, M., Béni, S., Haghedooren, E., *et al.* Combined use of liquid chromatography with mass spectrometry and nuclear magnetic resonance for the identification of degradation compounds in an erythromycin formulation. *Anal. Bioanal. Chem.* **402**(2), 781-790 (2012).
2. Steinmetz, W.E., Shapiro, B.L., and Roberts, J.J. The structure of erythromycin enol ether as a model for its activity as a motilide. *J. Med. Chem.* **45**(22), 4899-4902 (2002).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM