

Product Information

Erythromycin Ready Made Solution

E1236

Synonyms: E-Mycin, Erythrocin, Erythromycin A, Erythromycinum

CAS Number: 114-07-8

Molecular Formula: $C_{37}H_{67}NO_{13}$

Molecular Weight: 733.93

Storage Temperature 2-8 °C

Product Description

Erythromycin is a macrolide antibiotic with a broad antimicrobial spectrum affecting both Gram-positive and Gram-negative bacteria.¹ Erythromycin displays bacteriostatic activity, inhibiting growth of bacteria by binding to the 50S subunit of the bacterial rRNA complex, thus inhibiting its protein synthesis.² This antibiotic is active against *Neisseria*, *Bordetella*, *Brucella*, *Campylobacter*, *Legionella*, *Treponema*, *Chlamydia* and *Mycoplasma* bacteria.³

Erythromycin was first isolated from the soil sample as is described in McGuire et al. in 1952.⁴ The antibiotic is one of the metabolic products of a strain of *Streptomyces erythreus* (designation changed to *Saccharopolyspora erythraea*) found in the samples.⁵

Erythromycin Ready Made solution is composed largely of Erythromycin A with small amounts of Erythromycin B and C. The product is a sterile-filtered antibiotic, cell culture tested and suitable for cell culture applications. This product contains 50 mg/mL of Erythromycin dissolved in Methanol.

The recommended working concentration is 50 µg/mL for eukaryotic cell culture.

Precautions and Disclaimer

For Laboratory Use Only. Not for drug, household, or other uses.

Preparation Instructions

This product is recommended for use in cell culture applications at a dilution of 1 mL per liter for a final concentration of 50 µg/mL.

Stability

Erythromycin Ready Made solution is stable at 4°C for 2 years.

References

1. Platon V.M. et al., Erythromycin Formulations—A Journey to Advanced Drug Delivery. *Pharmaceutics*. 2022 Oct; 14(10): 2180.
2. Trevor A.J. et al., Chemotherapeutic Drugs; Chapter 44: Chloramphenicol, Tetracyclines, Macrolides, Clindamycin, & Streptogramins". *Katzung & Trevor's Pharmacology: Examination & Board Review* (9th ed.). New York: McGraw-Hill Medical. pp.389–396.
3. Washington J.A. 2nd, Wilson W.R., Erythromycin: a microbial and clinical perspective after 30 years of clinical use (part 1), *Mayo Clin Proc* 1985 Mar; 60(3):189.
4. Mcguire J.M. et al., Erythromycin, Its Salts, and Method of Preparation. 2,653,899. U.S. Patent. 1952 Sep.
5. Oliynyk M. et al., Complete Genome Sequence of the Erythromycin-Producing Bacterium *Saccharopolyspora Erythraea* NRRL23338. *Nat. Biotechnol.* 2007 Apr; 25:447.

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