# PRODUCT INFORMATION



## **Erythromycin lactobionate**

Item No. 17189

**CAS Registry No.:** 3847-29-8

4-O-β-D-galactopyranosyl-D-gluconate Formal Name:

erythromycin

MF: C<sub>37</sub>H<sub>67</sub>NO<sub>13</sub> • C<sub>12</sub>H<sub>22</sub>O<sub>12</sub>

FW: 1,092.2

Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

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

### **Laboratory Procedures**

Erythromycin lactobionate is supplied as a crystalline solid. A stock solution may be made by dissolving the erythromycin lactobionate in water. The solubility of erythromycin lactobionate in water is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

#### Description

Erythromycin lactobionate is a macrolide antibiotic and water-soluble form of erythromycin (Item No. 16486).1 It is active against S. aureus and S. pneumoniae, as well as clinical isolates of group A streptococci (MICs = 0.6, 0.06, and 0.031 μg/ml, respectively).<sup>2,3</sup> Erythromycin lactobionate (50 mg/kg) increases survival and reduces the number of lung colony forming units (CFUs) in a mouse model of S. pneumoniae-induced pneumonia.<sup>3</sup> It also increases survival in mice infected with *P. aeruginosa* when administered at doses of 50 and 100 mg/kg.4 Formulations containing erythromycin lactobionate have been used in the treatment of various Gram-positive and Gram-negative bacterial infections.

## References

- 1. Periti, P., Mazzei, T., Mini, E., et al. Clinical pharmacokinetic properties of the macrolide antibiotics. Effects of age and various pathophysiological states (Part I). Clin. Pharmacokinet. 16(4), 193-214 (1989).
- Lebek, G. and Thöni, G. Effects in vitro of erythromycin, alone and in combination with penicillin, on staphylococci, pneumococci and streptococci. Curr. Med. Res. Opin. 5(2), 3-14 (1978).
- 3. Azoulay-Dupuis, E., Bedos, J.P., Vallée, E., et al. Antipneumococcal activity of ciprofloxacin, ofloxacin, and temafloxacin in an experimental mouse pneumonia model at various stages of the disease. J. Infect. Dis. 163(2), 319-324 (1991).
- 4. Hirakata, Y., Kaku, M., Tomono, K., et al. Efficacy of erythromycin lactobionate for treating Pseudomonas aeruginosa bacteremia in mice. Antimicrob. Agents Chemother. 36(6), 1198-1203 (1992).

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

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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