

PRODUCT INFORMATION



Polymyxin B₁ Isoleucine (sulfate) Item No. 14075

Formal Name: N-((S)-4-amino-1-(((2S,3R)-1-(((S)-4-amino-1-oxo-1-(((3S,6S,9S,12S,15R,18S,21S)-6,9,18-tris(2-aminoethyl)-15-benzyl-12-((S)-sec-butyl)-3-((R)-1-hydroxyethyl)-2,5,8,11,14,17,20-heptaaxo-1,4,7,10,13,16,19-heptaazacyclotricosan-21-yl)amino)butan-2-yl)amino)-3-hydroxy-1-oxobutan-2-yl)amino)-1-oxobutan-2-yl)-6-methyloctanamide, monosulfate

MF: C₅₆H₉₈N₁₆O₁₃ • H₂SO₄

FW: 1,301.6

Purity: ≥90%

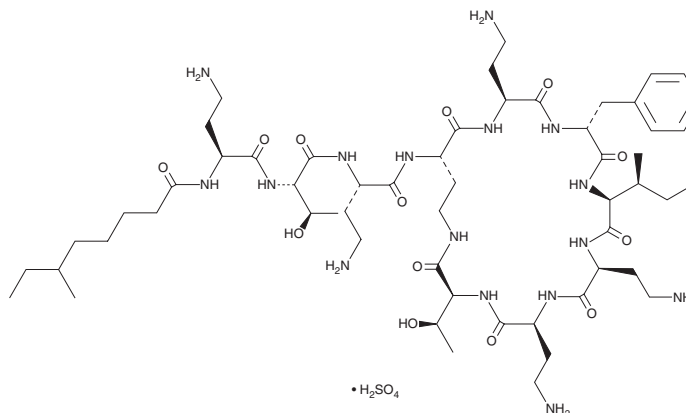
Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years

Item Origin: Bacterium/*Bacillus polymyxa*

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



Laboratory Procedures

Polymyxin B₁ isoleucine (sulfate) is supplied as a crystalline solid. Aqueous solutions of polymyxin B₁ isoleucine (sulfate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of polymyxin B₁ isoleucine (sulfate) in PBS (pH 7.2) is approximately 0.3 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Polymyxin B₁ isoleucine differs from polymyxin B₁ by having isoleucine rather than leucine as a component of the cyclic peptide. Polymyxin B₁ isoleucine is comparable to other B polymyxins in its ability to kill *P. aeruginosa*, *A. baumannii*, and *K. pneumoniae* isolates.¹ Its relative pharmacokinetics and nephrotoxicity have not been examined.

Reference

1. Tam, V.H., Cao, H., Ledesma, K.R., et al. *In vitro* potency of various polymyxin B components. *Antimicrob. Agents Chemother.* **55(9)**, 4490-4491 (2011).

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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