

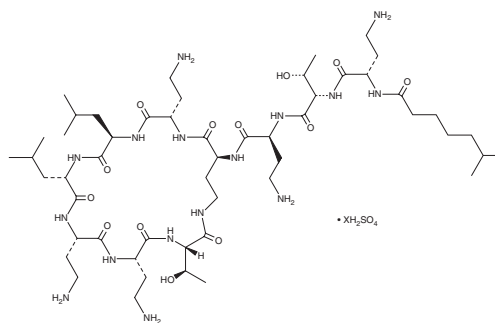
PRODUCT INFORMATION



Polymyxin E₂ (sulfate)

Item No. 39721

CAS Registry No.: 1338055-88-1
Formal Name: 1-[(2S)-4-amino-2-[(6-methyl-1-oxoheptyl)amino]butanoic acid]-polymyxin E₁, sulfate
Synonym: Colistin B sulfate
MF: C₅₂H₉₈N₁₆O₁₃ • XH₂SO₄
FW: 1,155.4
Purity: ≥90%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years
Item Origin: Bacterium/*Bacillus polymyxa* var. *colistinus*



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

Laboratory Procedures

Polymyxin E₂ (sulfate) is supplied as a solid. Aqueous solutions of polymyxin E₂ (sulfate) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of polymyxin E₂ (sulfate) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Polymyxin E₂ is a peptide antibiotic and a major constituent of the cationic lipopeptide antibiotic colistin (Item No. 17584) originally isolated from *B. polymyxa*.¹ It is active against the plant pathogenic bacteria *X. oryzae* (EC₅₀ = 0.21 µg/ml) and prevents and reverses rice bacterial leaf blight in greenhouse studies when applied at a concentration of 200 µg/ml.²

References

1. Suzuki, T., Inouye, H., Fujikawa, K., *et al.* Studies on the chemical structure of colistin. I. Fractionation, molecular weight determination, amino acid and fatty acid composition. *J. Biochem.* **54**(1), 25-33 (1963).
2. Yi, W., Chen, C., and Gan, X. Polymyxin B₁ and E₂ from *Paenibacillus polymyxa* Y-1 for controlling rice bacterial disease. *Front. Cell. Infect. Microbiol.* **12**:866357, (2022).

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.

WARRANTY AND LIMITATION OF REMEDY

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