

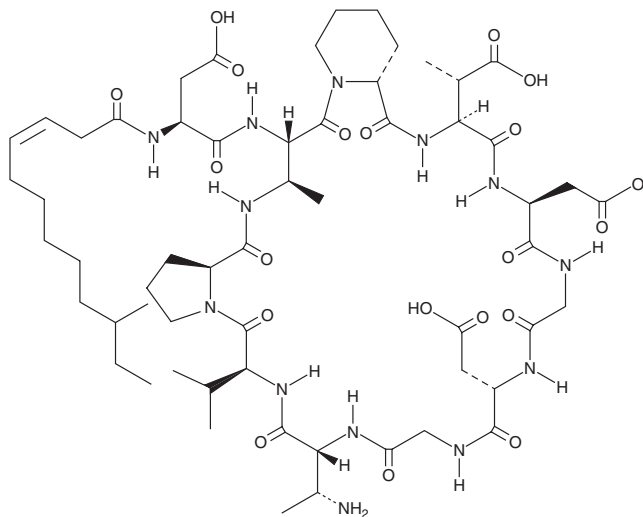
PRODUCT INFORMATION



Amphomycin

Item No. 17091

CAS Registry No.: 1402-82-0
Formal Name: 2,2'-((6S,9R,15S,21S,24S,26aR,33S,34R,36aS)-9-((R)-1-aminoethyl)-33-((2S)-3-carboxy-2-((Z)-10-methyldodec-3-enamido)propanamido)-24-((S)-1-carboxyethyl)-6-isopropyl-34-methyl-5,8,11,14,17,20,23,26,32,36-decaoxotetracontahydro-1H,5H-pyrrolo[1,2-a]pyrrolo[1,2-y][1,4,7,10,13,16,19,22,25,28]decaazacyclohentriacontine-15,21-diyl) diacetic acid
MF: C₅₈H₉₁N₁₃O₂₀
FW: 1,290.4
Purity: ≥95%
Supplied as: A 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

Amphomycin is supplied as a solid. A stock solution may be made by dissolving the amphomycin in the solvent of choice, which should be purged with an inert gas. Amphomycin is soluble in ethanol, methanol, DMSO, and dimethyl formamide.

Description

Amphomycin is a natural antibacterial lipopeptide first isolated from *S. canus*. Lipopeptides are cyclic depsipeptides with a peptidyl side chain capped with a saturated alkyl tail.¹ They preferentially target Gram-positive bacteria and may be useful against drug resistant strains.¹ Amphomycin is also an inhibitor of peptidoglycan synthesis in both bacterial and mammalian systems, as it binds with phosphorylated substrates in a calcium-dependent manner.²⁻⁵

References

1. Fair, R.J. and Tor, Y. Antibiotics and bacterial resistance in the 21st century. *Perspect. Medicin. Chem.* **6**, 25-64 (2014).
2. Spencer, J.P. and Elbein, A.D. Transfer of mannose from GDP-mannose to lipid-linked oligosaccharide by soluble mannosyl transferase. *Proc. Natl. Acad. Sci. USA* **77**(5), 2524-2527 (1980).
3. Kang, M.S., Spencer, J.P., and Elbein, A.D. Amphomycin inhibition of mannose and GlcNAc incorporation into lipid-linked saccharides. *J. Biol. Chem.* **253**(24), 8860-8866 (1978).
4. Banerjee, D.K. Amphomycin inhibits mannosylphosphoryldolichol synthesis by forming a complex with dolichylmonophosphate. *J. Biol. Chem.* **264**(4), 2024-2028 (1989).
5. Cooper, H.N., Gurcha, S.S., Nigou, J., et al. Characterization of mycobacterial protein glycosyltransferase activity using synthetic peptide acceptors in a cell-free assay. *Glycobiology* **12**(7), 427-434 (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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