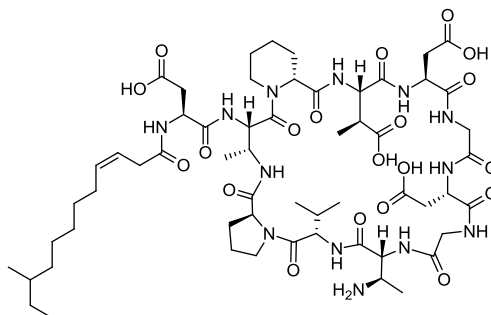


Amphomycin

Code No.: **BIA-A1601**

Pack sizes: **1 mg, 5 mg**



Synonyms : Glumamycin, Amfomycin, A1437E

Specifications

CAS #	: 1402-82-0
Molecular Formula	: C₅₈H₉₁N₁₃O₂₀
Molecular Weight	: 1290.4
Source	: <i>Streptomyces</i> sp.
Appearance	: Off-white to fawn solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO.

Application Notes

Amphomycin is a lipopeptide antibiotic produced by Streptomyces and Actinoplanes, initially reported by researchers at Bristol-Myers in 1953 from Streptomyces canus. Amphomycin was marketed as a complex of closely related analogues in the 1950s and 1960s. Structure elucidation was not completed until 2000. Amphomycin is active against Gram positive bacteria, inhibiting peptidoglycan synthesis and blocking cell wall development. Amphomycin is closely related to a number of "lost" antibiotics, aspartocin, crystallomycin, glumamycin, friulimicin, laspartocin, tsushimycin and zaomycin. Interest in amphomycin was re-awakened with the discovery of friulimicin activity against antibiotic resistant strains.

References

1. Amphomycin. A new antibiotic. Heineman B. et al., Antibiot. Chemother. 1953, 3, 1239.
2. Studies on bacterial cell wall inhibitors. II. Inhibition of peptidoglycan synthesis in vivo and in vitro by amphomycin. Tanaka H. et al., Biochim. Biophys. Acta 1977, 497, 633.
3. Friulimicins: Novel lipopeptide antibiotics with peptidoglycan synthesis inhibiting activity from Actinoplanes friuliensis sp. nov. I. Taxonomic studies of the producing microorganism and fermentation. Aretz W. et al., J. Antibiot. 2000, 53, 807.
4. Friulimicins: Novel lipopeptide antibiotics with peptidoglycan synthesis inhibiting activity from Actinoplanes friuliensis sp. nov. II. Isolation and structural characterization. Vertesy L. et al., J. Antibiot. 2000, 53, 816.