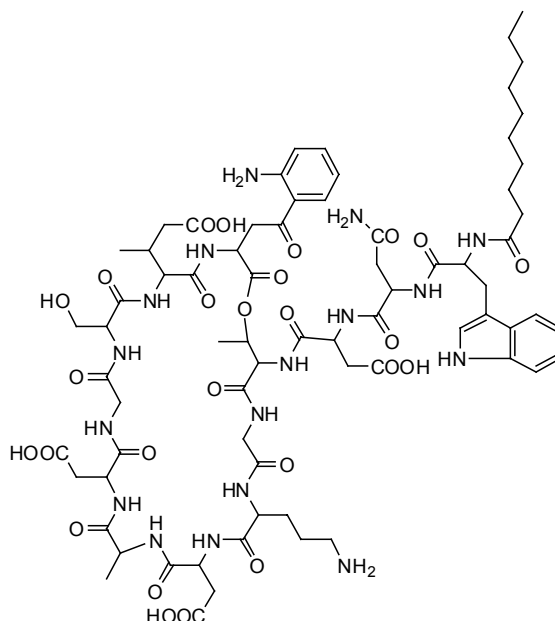


Daptomycin

Code: **BIA-D1205**

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



Synonyms : **LY 146032, Dapcin**

Specifications

CAS #	: 103060-53-3
Molecular Formula	: C₇₂H₁₀₁N₁₇O₂₆
Molecular Weight	: 1620.7
Source	: <i>Streptomyces</i> sp. MST-AS5965
Appearance	: Light tan solid
Purity	: > 90%
Long Term Storage	: - 20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility

Application Notes

Daptomycin is a member of the Antibiotic A 21978 complex of high molecular weight cyclic lipopeptides with potent antibiotic activity, notably against MRSA, VISA and VRSA resistant bacteria. Originally isolated from *Streptomyces roseosporus* by Eli Lilly in the 1980s, daptomycin was selected and developed by Cubist Pharmaceuticals for human use. Daptomycin exhibits Ca-dependent depolarisation of the bacterial membrane resulting in loss of membrane potential leading to inhibition of DNA, RNA and protein synthesis which results in cell death.

References

1. Role of branched chain fatty acid precursors in regulation factor profile in the biosynthesis of A21978 C complex. Zmijewski M. J. et al., J. Antibiotics 1986, 39, 1483.
2. Complex of new acidic peptide antibiotics. Isolation, chemistry, and mass spectral structure elucidation. Debono M. et al., J. Antibiotics 1987, 40, 761.
3. Daptomycin: a lipopeptide antibiotic for the treatment of serious Gram positive infections. Steenbergen J.N. et al., J. Antimicrobial Chemotherapy 2005, 55, 283.