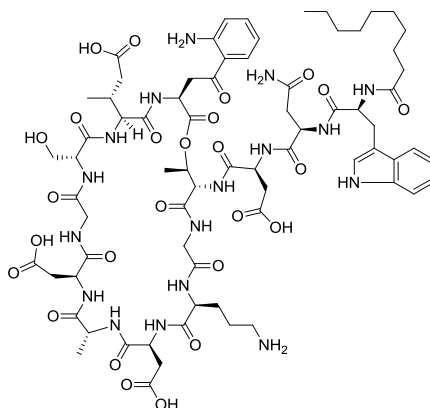


Daptomycin

Code No.: **BIA-D1205**

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



Synonyms : LY 146032

Specifications

CAS #	: 103060-53-3
Molecular Formula	: C₇₂H₁₀₁N₁₇O₂₆
Molecular Weight	: 1620.7
Source	: <i>Streptomyces</i> sp.
Appearance	: Off white to light tan solid
Purity	: >95% by HPLC
Long Term Storage	: -20°C
Solubility	: Soluble in ethanol, methanol, DMF or DMSO. Limited water solubility.

Application Notes

Daptomycin is a member of the A 21978 complex of high molecular weight cyclic lipopeptides with potent antibiotic activity, notably against MRSA, VISA and VRSA bacterial strains. 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.