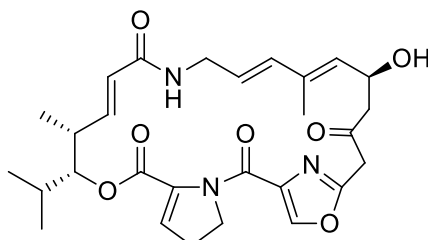


## Ostreogrycin A

Code No.: **BIA-O1131**

Pack sizes: **5 mg, 25 mg**



Synonyms : Mikamycin A, Pristinamycin IIA, Stephylomycin M1, Streptogramin A, Syncothrecin A, Synergistin A1, Virginiamycin M1, Vernamycin A, 14752-2, E129A, PA 114A, 1745Z3A, 547C, Factor M

## Specifications

CAS #	: <b>21411-53-0</b>
Molecular Formula	: <b>C<sub>28</sub>H<sub>35</sub>N<sub>3</sub>O<sub>7</sub></b>
Molecular Weight	: <b>525.6</b>
Source	: <b><i>Streptomyces</i> sp.</b>
Appearance	: <b>White solid</b>
Purity	: <b>&gt;95% by HPLC</b>
Long Term Storage	: <b>-20°C</b>
Solubility	: <b>Soluble in DMF or DMSO. Moderately soluble in methanol or ethanol. Poor water solubility.</b>

## Application Notes

Ostreogrycin A (virginiamycin M1, streptogramin A) is the major component of the virginiamycin complex. In the 1950s this complex was independently discovered so many times that the literature became highly confusing. Ostreogrycin A is a macrocyclic lactone antibiotic that acts synergistically with the structurally unrelated cyclic depsipeptides, virginiamycin B (ostreogrycin B, streptogramin B) and virginiamycin S, to inhibit peptide elongation. This is achieved by blocking formation of a peptide bond between the growing peptide chain (peptidyl-tRNA) linked to the 50S ribosome and aminoacyl-tRNA. Ostreogrycin A is highly active against Gram positive bacteria, particularly MRSA.

## References

1. Preparation and properties of an antibiotic complex E129. Ball S. 1958, 68, 24P.
2. Virginiamycin: nomenclature. Crooy P. and De Neys R. J. Antibiot. 1972, 25, 371.
3. Sites of interaction of streptogramin A and B antibiotics in the peptidyl transferase loop of 23 S rRNA and the synergism of their inhibitory mechanisms. Porse B.T. and Garrett R.A.J. Mol. Biol. 1999, 286, 375.
4. Chemistry and Biology of the Streptogramin A Antibiotics. Ahmed F. and Donaldson, W.A. Mini-Reviews in Org. Chemistry. 2007, 4, 159.