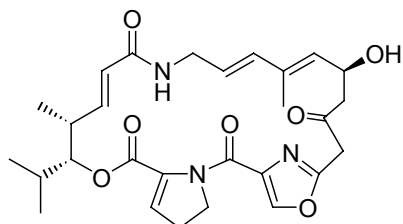


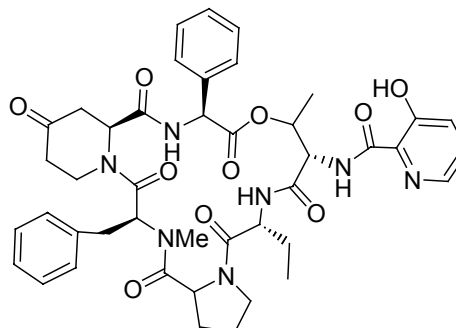
## Virginiamycin complex

Code: **BIA-V1188**

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



Virginiamycin M<sub>1</sub>



Virginiamycin S<sub>1</sub>

Synonyms : **Cebin V, Eskalin V, Eskamicin, Stafac, Stephylomycin, Mikamycin, Ostreogrycin, Patricin, Pristinamycin, Streptogramin, Vernamycin.**

## Specifications

CAS # : **11006-76-1**

Molecular Formula : **C<sub>28</sub>H<sub>35</sub>N<sub>3</sub>O<sub>7</sub> (Virginiamycin M<sub>1</sub>) & C<sub>43</sub>H<sub>49</sub>N<sub>7</sub>O<sub>10</sub> (Virginiamycin S<sub>1</sub>)**

Molecular Weight : **525.6 (Virginiamycin M<sub>1</sub>) & 823.9 (Virginiamycin S<sub>1</sub>)**

Source : ***Streptomyces* sp. MST-AS4173**

Appearance : **White solid**

Purity : **> 99% by HPLC (75% Virginiamycin M<sub>1</sub>, 20% Virginiamycin S<sub>1</sub>, ~5% Other minor analogues)**

Long Term Storage : **-20°C**

Solubility : **Soluble DMF or DMSO. Virginiamycin M<sub>1</sub> has only limited solubility in ethanol and methanol.**

## Application Notes

Virginiamycin complex is defined as a mixture of 75% virginiamycin M1 (ostreogrycin A) and 25% virginiamycin S1 and the less abundant S analogues. As the two major components have quite different solubilities these proportions are not readily achieved or used. BioAustralis has isolated and re-combined the individual components to provide the defined components of virginiamycin complex. The structure composition of the complex is important as Virginiamycin S1 acts a synergist binding to the conformational change induced by ostreogrycin A of the peptidyl transferase centre of the 50S ribosome.

## References

1. The structures of the minor components of virginiamycin S. Vanderhaeghe, H. et al., *Tet. Lett.* **1971**, 2687
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.