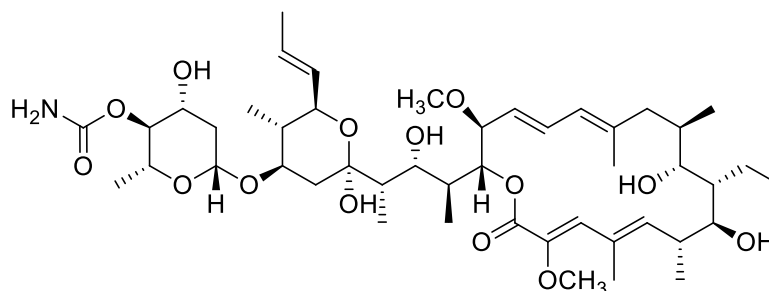


## Concanamycin A

Code No.: **BIA-C1021**

Pack sizes: **0.25 mg, 1 mg**



Synonyms : Folimycin, TAN 1323B

### Specifications

CAS #	: <b>80890-47-7</b>
Molecular Formula	: <b>C<sub>46</sub>H<sub>75</sub>NO<sub>14</sub></b>
Molecular Weight	: <b>866.1</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 ethanol, methanol, DMF or DMSO. Poor water solubility.</b>

### Application Notes

Concanamycin A is the major analogue of the concanamycin complex produced by *Streptomyces* sp. It has been shown to act as a potent and specific vacuolar-ATPase inhibitor. Concanamycin A inhibits the acidification of organelles and blocks cell surface expression of viral envelope glycoproteins without affecting their synthesis. It also interferes with intracellular protein trafficking and inhibits perforin- and Fas-based lytic pathways in cell-mediated cytotoxicity. Concanamycins are structurally related to the bafilomycins.

### References

1. The V-ATPase inhibitors concanamycin A and bafilomycin A lead to Golgi swelling in tobacco BY-2 cells. Robinson D.G. et al., *Protoplasma* 2004, 224, 255.
2. Concanamycin A, a powerful tool for characterization and estimation of contribution of perforin- and Fas-based lytic pathways in cell-mediated cytotoxicity. Kataoka T. et al., *J. Immunol.* 1996, 156, 3678.
3. Specific inhibitors of vacuolar type H(+)-ATPases induce apoptotic cell death. Nishihara T. et al., *Biochem. Biophys. Res. Commun.* 1995, 212, 255.
4. Folimycin (concanamycin A), a specific inhibitor of V-ATPase, blocks intracellular translocation of the glycoprotein of vesicular stomatitis virus before arrival to the Golgi apparatus. Muroi M. et al., *Cell Struct. Funct.* 1993, 18, 139.