



Bafilomycin C1

Code: **BIA-B1111**

Pack sizes: 1.0 mg, 5.0 mg

Synonyms : Antibiotic L-681,110A1

Specifications

CAS # : 88979-61-7 Molecular Formula : $C_{39}H_{60}O_{12}$ Molecular Weight : 720.4

Source : Streptomyces sp. MST-AS5338

Appearance : Light tan solid
Purity : > 95% by HPLC

Long Term Storage : -20°C

Solubility : Soluble in ethanol, methanol, DMF or DMSO. Note, forms methyl ketal on long

term storage in methanol

Application Notes

Bafilomycin C1 shares a similar mode of action and activity as its more accessible A1 analogue. Bafilomycin C1 is broadly active against bacteria, fungi, insects, nematodes and cestodes. It has attracted interest as a potential antiosteoporotic agent in treating bone lytic diseases. The presence of the fumarate group has provided an ideal ligand for affinity chromatography of V-ATPase.

References

- 1. Structure and function of V-ATPases in osteoclasts: potential therapeutic targets for the treatment of osteolysis. Xu J. et al. *J. Histol. Histopathol.* **2007**, 22, 443.
- 2. Bafilolides, Potent Inhibitors of the Motility and Development of the Free-Living Stages of Parasitic Nematodes. Lacey E. et al. *Int. J. Parasitol.* **1995**, 25, 349.
- 3. Purification of Vacuolar ATPase with Bafilomycin C1 Affinity Chromatography. Rautiala T.J. et al. *Biochem. Biophys. Res. Comm.* **1993**, 194, 50.