

Bafilomycin A1

Autophagy Inhibitor - V-ATPase inhibitor

Catalog # tlr1-baf1

For research use only

Version # 13D02-MM

PRODUCT INFORMATION

Content:

- 10 µg Bafilomycin A1

Storage and stability:

- Bafilomycin A1 is provided as a solid and shipped at room temperature. Store at -20°C. Solid product is stable 1 year at -20°C.
- Upon resuspension, prepare aliquots of Bafilomycin A1 and store at -20°C. Avoid repeated freeze-thaw cycles. Resuspended product is stable for 3 months at -20°C when properly stored.

CHEMICAL PROPERTIES

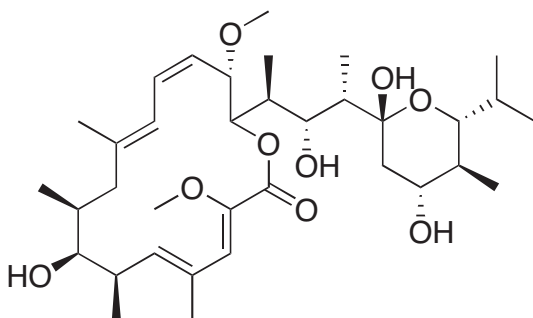
CAS number: 88899-55-2

Formula: C₃₅H₅₈O₉

Molecular weight: 622.83

Solubility: 0.1 mg/ml in DMSO or ethanol

Purity: >90% (HPLC)



DESCRIPTION

Autophagy is a pathway by which cytoplasmic constituents, including organelles and intracellular pathogens, are sequestered in a double-membrane-bound autophagosome and delivered to the lysosome for degradation. The role of autophagy is to eliminate unwanted constituents from the cell and recycle cytoplasmic material allowing the cell to maintain macromolecular synthesis and energy homeostasis during starvation and other stressful conditions.

Bafilomycin A1 prevents maturation of autophagic vacuoles by inhibiting fusion between autophagosomes and lysosomes¹. Bafilomycin A1 acts by inhibiting vacuolar H⁺ ATPase (V-ATPase).

1. Yamamoto A. *et al.*, 1998. Bafilomycin A1 prevents maturation of autophagic vacuoles by inhibiting fusion between autophagosomes and lysosomes in rat hepatoma cell line, H-4-II-E cells. *Cell Struct Funct.* 23(1):33-42.

METHODS

Working concentration: 0.1-1 µM

Preparation of stock solution (100 µM)

To obtain a 100 µM stock solution:

1. Add 160 µl DMSO to 10 µg Bafilomycin A1 vial.
2. Vortex until complete solubilization.
3. Prepare aliquots of Bafilomycin A1 and store at -20°C.

RELATED PRODUCTS

Product	Catalog Code
Rapamycin	tlrl-rap
3-Methyladenine	tlrl-3ma
LY294002	tlrl-ly29
Wortmannin	tlrl-wtm

TECHNICAL SUPPORT

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