BioViotica
Rare Active Natural Products

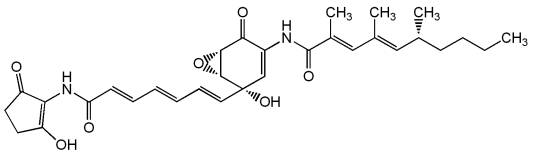
PRODUCT DATA SHEET

www.bioviotica.com

BVT-0091

08-Jun-2011

Manumycin A



BVT-0091-M001	1 mg
BVT-0091-M005	5 mg
BVT-0091-M010	10 mg
Formula	$C_{31}H_{38}N_2O_7$
MW	550.6
CAS	52665-74-4

Handling / Storage

Shipping	BLUE ICE
Short Term Storage	+4°C
Long Term Storage	-20°C

Protect from light.

Use / Stability

Stable for at least 1 year after receipt when stored at -20°C. After reconstitution protect from light at -20°C.

MSDS available at www.adipogen.com or upon request.

Product Specifications

Source/Host	Isolated from *Streptomyces parvulus*.
Purity	≥96% (HPLC)
Identity	Determined by ^{1}H-NMR.
Appearance	Yellow to brown powder.
Solubility	Soluble in DMSO or methanol; insoluble in water.

Product Description

- Antibiotic.
- Potent, selective and competitive cell permeable rasfarnesyltransferase inhibitor (IC_{50} = 30 nM).
- Does not affect geranylgeranyltransferase (IC_{50} = 180 µM).
- Inhibition is competitive with respect to farnesyl pyrophosphate and non-competitive with respect to Ras.
- Neutral sphingomyelinase inhibitor.
- Blocks insulin-induced MAP kinase activation in rat cardiac myocytes (19 µM).

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Product Specific References

1. Identification of Rasfarnesyltransferase inhibitors by microbial screening: M. Hara et al.; PNAS **90**, 2281 (1993)
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9. A yeast-based genomic strategy highlights the cell protein networks altered by FTase inhibitor peptidomimetics: G. Porcu, et al.; Mol. Cancer **9**:197 (2010)
10. Targeting farnesyl-transferase as a novel therapeutcstrategy for mevalonate kinase defiency: In vitro and in vivo approaches: L. De Leo, et al.; Pharmacol. Res. **61**, 506 (2010)

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