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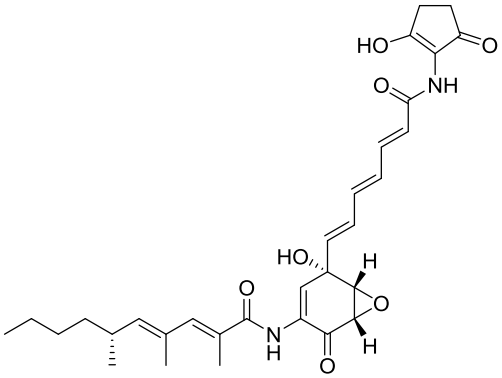
PRODUCT DATA SHEET

Manumycin A

Code No.: **BIA-M1905**

Pack sizes: **1 mg, 5 mg**



Synonyms : (-)-Manumycin A, NSC 622141, UCF 1C, Antibiotic TMC 1F

Specifications

CAS #	:	**52665-74-4**
Molecular Formula	:	**$C_{31}H_{38}N_2O_7$**
Molecular Weight	:	**550.6**
Source	:	***Streptomyces* sp.**
Appearance	:	**Yellow solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in ethanol, methanol, DMF or DMSO.**

Application Notes

Manumycin A was isolated by Zeeck and colleagues at the University of Gottingen, Germany published in 1987. Manumycin A is a potent and selective inhibitor of Ras farnesyl transferase. Manumycin A induces apoptosis and inhibits angiogenesis, and has antibacterial, anti-inflammatory and antiparasitic activity. Manumycin A retards the development of atherosclerosis with concomitant alleviation of oxidative stress in apoE-deficient mice.

References

1. The structure of manumycin. I. Characterization, structure elucidation and biological activity. Zeeck A. et al., J. Antibiot. 1987, 40, 1530.
2. Identification of Ras farnesyltransferase inhibitors by microbial screening. Hara M. et al., Proc. Nat. Acad. Sci. 1993, 90, 2281.
3. Farnesyltransferase inhibitor manumycin targets IL1β-Ras-HIF-1α axis in tumor cells of diverse origin. Sharma V. et al., Inflamm. 2012, 35, 516.
4. Farnesyltransferase inhibitor, manumycin a, prevents atherosclerosis development and reduces oxidative stress in apolipoprotein E-deficient mice. Sugita M. et al., Arterioscler. Thromb. Vasc. Biol. 2007, 27, 1390.

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