Structure H₃C H₃C H₃C H₄C H₃C H₃C H₄C H₄C

Origin: Streptomyces sp. K06-0806

CAS Registry Number: 12704-90-4

CA Index Name: 1-Methylmocimycin

Appearance: yellow solid

Molecular Formula/ Weight: $C_{44}H_{62}N_2O_{12}=810.99$

Melting Point: 135-138 | Purity: 95>% by HPLC

Solubility: Sol. MeOH, Chloroform

Inso. water

Background Information:

Aurodox produced essentially complete inhibition of poly(Phe) synthesis with a 50% inhibitory concentration at 0.13uM. Type III inhibitor. Aurodox was isolated from secondary metabolites of *Streptomyces goldiniensis*¹⁾ considered as possibly effective against *streptococcus pyogenes* infections. It may promote growth in poultry. Contact of aurodix-producing *Streptomyces goldiniensis* with its antibiotic is necessary for expression of resistance to aurodox. Aurodox inhibits both protein synthesis and the release of elongation factor Tu from the ribosomes in the producing organism. Mutants resistant to growth inhibition by aurodox are also resistant to feedback inhibition of aurodox biosynthesis by antibiotic²⁾.

Handling and Storage:

Store at -20 . Protect from light

References:

- 1. C. Liu, et al. J Antibiot. 30, 244-251 (1977).
- 2. J. Unowsky & D. C. Hoppe, J Antibiot. 31, 662-6 (1978).