PRODUCT INFORMATION



Citromycetin

Item No. 24175

CAS Registry No.: 478-60-4

Formal Name: 8,9-dihydroxy-2-methyl-4-

oxo-4H,5H-pyrano[3,2-c][1]

benzopyran-10-carboxylic acid

Synonym: NSC 53584 MF: $C_{14}H_{10}O_{7}$ FW: 290.2 **Purity:** ≥95% Supplied as: A solid Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Citromycetin is supplied as a solid. A stock solution may be made by dissolving the citromycetin in the solvent of choice, which should be purged with an inert gas. Citromycetin is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

Description

Citromycetin is a fungal metabolite originally isolated from P. frequentans with antibiotic activity against the Gram-positive bacteria S. aureus and the Gram-negative bacteria V. cholerae and S. flexneri (MICs = 64 µg/ml for both).^{1,2} Citromycetin is selectively cytotoxic to cancerous cells over non-cancerous cells (LC_{50} s = 9.21 and 261.14 µg/ml for HeLa and Vero cells, respectively). Formulations containing citromycetin have been studied for use in the treatment of amyloidosis and α -synuclein fibril diseases.³

References

- 1. Grove, J.F. and Brian, P.W. Identity of frequentic acid and citromycetin. Nature 167(4259), 995 (1951).
- 2. Jouda, J.-B., Tamokou, D.-d.-D., Mbazoa, C.D., et al. Anticancer and antibacterial secondary metabolites from the endophytic fungus Penicillium sp. CAM64 against multi-drug resistant Gram-negative bacteria. Afr. Health Sci. 16(3), 734-743 (2016).
- 3. Castillo, G.M., Choi, P.Y., and Snow, A.D. Polyhydroxylated aromatic compounds for the treatment of amyloidosis and α-synuclein fibril diseases. WO2001049281 A2 (2001).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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