

PRODUCT INFORMATION



Iromycin A

Item No. 19621

CAS Registry No.: 213137-53-2
Formal Name: 6-[(2E,5E)-3,7-dimethyl-2,5-octadien-1-yl]-4-hydroxy-3-methyl-5-propyl-2(1H)-pyridinone

Synonym: NK 26588

MF: C₁₉H₂₉NO₂

FW: 303.4

Purity: ≥98%

Supplied as: A solid

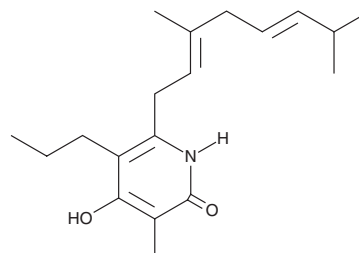
Storage: -20°C

Stability: ≥4 years

Special Conditions: After reconstitution protect from light at -20°C

Item Origin: Bacterium/*Streptomyces bottropensis*

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



Laboratory Procedures

Iromycin A is supplied as a solid. A stock solution may be made by dissolving the iromycin A in the solvent of choice, which should be purged with an inert gas. Iromycin A is soluble in the organic solvent DMSO. Iromycin A is slightly soluble in methanol.

Description

Iromycin A is a bacterial pyridone metabolite that inhibits nitric oxide synthase (NOS) activity, with selectivity for NOS III (endothelial NOS) over NOS I (neuronal NOS).^{1,2} Iromycin metabolites and derivatives block NADH oxidation in beef heart submitochondrial particles (IC₅₀ = 0.461 μM for iromycin A).³

References

1. Shojaei, H., Li-Böhmer, Z., and von Zezschwitz, P. Iromycins: A new family of pyridone metabolites from *Streptomyces* sp. II. Convergent total synthesis. *J. Org. Chem.* **72(14)**, 5091-5097 (2007).
2. Surup, F., Wagner, O., von Frieling, J., *et al.* The iromycins, a new family of pyridone metabolites from *Streptomyces* sp. I. Structure, NOS inhibitory activity, and biosynthesis. *J. Org. Chem.* **72(14)**, 5085-5090 (2007).
3. Surup, F., Shojaei, H., von Zezschwitz, P., *et al.* Iromycins from *Streptomyces* sp. and from synthesis: New inhibitors of the mitochondrial electron transport chain. *Bioorg. Med. Chem.* **16(4)**, 1738-1746 (2008).

WARNING

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

SAFETY DATA

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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