

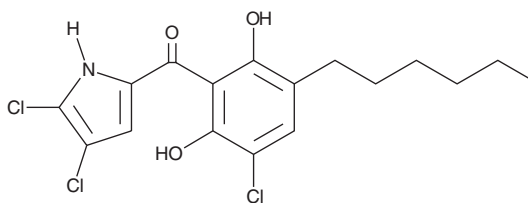
Product Information



Celastramycin A

Catalog No. 13519

CAS Registry No.: 491600-94-3
Formal Name: (3-chloro-5-hexyl-2,6-dihydroxyphenyl)(4,5-dichloro-1H-pyrrol-3-yl)-methanone
MF: C₁₇H₁₈Cl₃NO₃
FW: 390.7
Purity: ≥97%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that celastramycin A be stored as supplied at -20°C. It should be stable for at least two years.

Celastramycin A is supplied as a crystalline solid. A stock solution may be made by dissolving the celastramycin A in the solvent of choice. Celastramycin A is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of celastramycin A in these solvents is approximately 20 mg/ml.

Celastramycin A is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, celastramycin A should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Celastramycin A has a solubility of approximately 0.2 mg/ml in a 1:4 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Celastramycin A is a bioactive compound isolated from endophytic bacteria living in plants of the *Celastraceae* family.¹ This benzoyl pyrrole inhibits the growth of bacteria and mycobacteria, with a minimal inhibitory concentration as low as 0.05 µg/ml.¹ Celastramycin A also suppresses the production of interleukin-8 in human umbilical vein endothelial cells as stimulated by tumor necrosis factor-α (IC₅₀ = 0.01 µg/ml).²

References

1. Pullen, C., Schmitz, P., Meurer, K., *et al.* New and bioactive compounds from *Streptomyces* strains residing in the wood of Celastraceae. *Planta* **216**, 162-167 (2002).
2. Kikuchi, H., Sekiya, M., Katou, Y., *et al.* Revised structure and synthesis of Celastramycin A, a potent innate immune suppressor. *Organic Lett.* **11(8)**, 1693-1695 (2009).

Related Product

Thiocarlide - Cat. No. 10006976

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WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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