

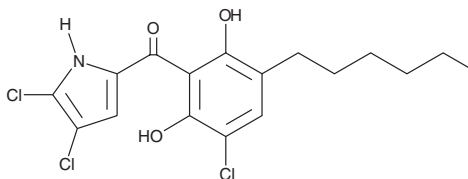
PRODUCT INFORMATION



Celastramycin A

Item 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%
UV/Vis.: λ_{max}: 313 nm
Supplied as: A crystalline 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

Celastramycin A is supplied as a crystalline solid. A stock solution may be made by dissolving the celastramycin A in the solvent of choice, which should be purged with an inert gas. Celastramycin A is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of celastramycin A in ethanol is approximately 30 mg/ml and approximately 20 mg/ml in DMSO and DMF.

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.

Description

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).

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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