

PRODUCT INFORMATION



Cochlioquinone A

Item No. 19440

CAS Registry No.: 32450-25-2

Formal Name: (3R,4aR,6aR,12S,12aS,12bR)-
9-[(1S,2R,3S)-2-(acetyloxy)-
1,3-dimethylpentyl]-
1,2,3,4a,5,6,6a,12,12a,12b-decahydro-
12-hydroxy-3-(1-hydroxy-1-methyle-
thyl-6a,12b-dimethyl-pyrano[3,2-a]
xanthene-8,11-dione

MF: C₃₀H₄₄O₈

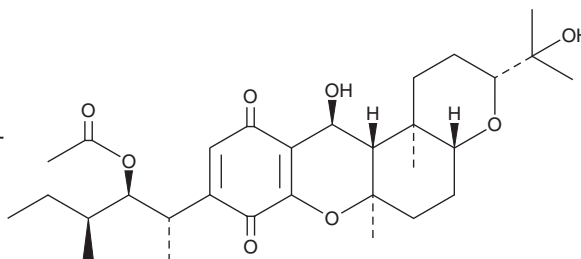
FW: 532.7

Purity: ≥99%

Supplied as: A yellow lyophilisate

Storage: -20°C

Stability: ≥4 years



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

Laboratory Procedures

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

Cochlioquinone A is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Cochlioquinone A, a bioactive compound isolated from *D. sacchari* and *Bipolaris* sp., is an inhibitor of diacylglycerol kinase (DGK; K_i = 3.1 μM) and diacylglycerol acyltransferase (DGAT; IC₅₀ = 5.6 μM).¹⁻³ It has been shown to reduce the concentration of phosphatidic acid in T cell lymphoma with an IC₅₀ value of 3 μM.² It is also reported to compete with macrophage inflammatory protein-1α for binding to human CCR5 chemokine receptors with an IC₅₀ value of 11 μM.³

References

1. Lee, H.B., Lim, C.-H., Kwon, H.J., *et al.* Inhibitory activity of diacylglycerol acyltransferase by cochlioquinones A and A1. *J. Antibiot. (Tokyo)* **56(11)**, 967-969 (2003).
2. Machida, T., Higashi, K., and Ogawara, H. Cochlioquinone A, an inhibitor of diacylglycerol kinase. *J. Antibiot. (Tokyo)* **48(10)**, 1076-1080 (1995).
3. Yoganathan, K., Yang, L.-K., Rossant, C., *et al.* Cochlioquinones and epi-cochlioquinones: Antagonists of the human chemokine receptor CCR5 from *Bipolaris brizae* and *Stachybotrys chartarum*. *J. Antibiot. (Tokyo)* **57(1)**, 59-63 (2004).

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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