PRODUCT INFORMATION



Altertoxin I

Item No. 21129

CAS Registry No.: 56258-32-3

Formal Name: (1S,12aR,12bS)-1,2,11,12,12a,12b-hexahydro-

1,4,9,12a-tetrahydroxy-3,10-perylenedione

Synonym: Dihydroalterperylenol

MF: $C_{20}H_{16}O_{6}$ 352.3 FW: **Purity:** ≥95% Supplied as: A powder Storage: -20°C Stability: ≥4 years

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

Laboratory Procedures

Altertoxin I is supplied as a powder. A stock solution may be made by dissolving the altertoxin I in the solvent of choice, which should be purged with an inert gas. Altertoxin I is soluble (≥10 mg/ml) in ethanol and dichloromethane.

Description

Altertoxin I is a natural mycotoxin first isolated from fungi of the genus Alternaria. It is a hydroxyperylenequinone that shows mutagenic activity against S. typhimurium and inhibits human topoisomerase II and bacterial gyrase. 1,2 Altertoxin I completely inhibits replication of HIV-1 virus at 2.2 μ M in a cell-based assay.3

References

- 1. Jarolim, K., Del Favero, G., Ellmer, D., et al. Dual effectiveness of Alternaria but not Fusarium mycotoxins against human topoisomerase II and bacterial gyrase. Arch. Toxicol. 91(4), 2007-2016 (2016).
- 2. Stack, M.E. and Prival, M.J. Mutagenicity of the Alternaria metabolites altertoxins I, II, and III. Appl. Environ. Microbiol. 52(4), 718-722 (1986).
- 3. Bashyal, B.P., Wellensiek, B.P., Ramakrishnan, R., et al. Altertoxins with potent anti-HIV activity from Alternaria tenuissima QUE1Se, a fungal endophyte of Quercus emoryi. Bioorg. Med. Chem. 22(21), 6112-6116 (2014).

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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