



LKT Laboratories, Inc.

Altertoxin 1

Phone: 888-558-5227
651-644-8424
Fax: 888-558-7329
Email: getinfo@lctlabs.com
Web: lctlabs.com

Product Information

Product ID A464768

CAS No. 56258-32-3

Chemical Name (12S,12aS,12bR)-4,9,12,12b-tetrahydroxy-2,11,12,12a-tetrahydro-1H-perylene-3,10-dione

Synonym (12S,12As,12Br)-4,9,12,12B-Tetrahydroxy-2,11,12,12A-Tetrahydro-1H-Perylene-3,10-Quinone, Altertoxin-I

Formula C₂₀H₁₆O₆

Formula Wt. 352.34

Melting Point

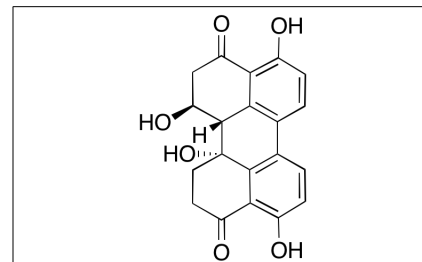
Purity ≥97%

Solubility Clear slight pink solution at 10mg/ml of Dichloromethane

Store Temp -20°C

Ship Temp Ambient

Description Altertoxin I is a mycotoxin produced by the fungi *Alternaria alternata* that is found as a contaminant in food and feed, particularly after a long period of storage. Altertoxin I is a metabolite that has been found to reduce the supercoiling activity of DNA gyrase. In addition, Altertoxin I has been evaluated for the ability to inhibit HIV-1 viral replication in A3.01 infected cells and was found to produce nearly complete inhibition.



Bulk quantities available upon request

Product ID	Size
A464768	1 mg
A464768	5 mg
A464768	10 mg

References 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.* 2017 Apr;91(4):2007-2016. PMID: 27682608.

Jarolim K, Del Favero G, Pahlke G, et al. Activation of the Nrf2-ARE pathway by the *Alternaria alternata* mycotoxins altertoxin I and II. *Arch Toxicol.* 2017 Jan;91(1):203-216. PMID: 27178040.

Bashyal BP, Wellensiek BP, Ramakrishnan R, et al. Altertoxins with potent anti-HIV activity from *Alternaria tenuissima* QUE1Se, a fungal endophyte of *Quercus emoryi*. *Bioorg Med Chem.* 2014 Nov 1;22(21):6112-6116. PMID: 25260957.

Pruss S, Fetzner R, Seither K, et al. Role of the *Alternaria alternata* blue-light receptor LreA (white-collar 1) in spore formation and secondary metabolism. *Appl Environ Microbiol.* 2014 Apr;80(8):2582-2591. PMID: 24532063.

Stack ME, Prival MJ. Mutagenicity of the *Alternaria* metabolites altertoxins I, II, and III. *Appl Environ Microbiol.* 1986 Oct;52(4):718-722. PMID: 3535674.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.