PRODUCT INFORMATION



(-)-Altenuene

Item No. 21130

CAS Registry No.: 889101-41-1

Formal Name: 2R,3R,4aR,4a-tetrahydro-2,3,7-

trihydroxy-9-methoxy-4a-methyl-

6H-dibenzo[b,d]pyran-6-one

MF: $C_{15}H_{16}O_{6}$ 292.3 FW: **Purity:** ≥98% Supplied as: A 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

(-)-Altenuene is supplied as a solid. A stock solution may be made by dissolving the (-)-altenuene in the solvent of choice, which should be purged with an inert gas. (-)-Altenuene is soluble in the organic solvent acetone at a concentration of approximately 10 mg/ml.

Description

(-)-Altenuene is a natural mycotoxin that was first isolated from A. tenuis. It has antioxidant activity and inhibits cholinesterases. Unlike tenuazonic acid (Item No. 11443), (-)-altenuene does not display toxicity as assessed by the chicken embryo assay.2 (-)-Altenuene does not display significant topoisomerase inhibitory activity, unlike alternariol (Item No. 11306).3

References

- 1. Bhagat, J., Kaur, A., Kaur, R., et al. Cholinesterase inhibitor (Altenuene) from an endophytic fungus Alternaria alternata: Optimization, purification and characterization. J. Appl. Microbiol. 121(4), 1015-1025 (2016).
- 2. Griffin, G.F. and Chu, F.S. Toxicity of the Alternaria metabolites alternariol, alternariol methyl ether, altenuene, and tenuazonic acid in the chicken embryo assay. Appl. Environ. Microbiol. 46(6), 1420-1422 (1983).
- 3. Fehr, M., Pahlke, G., Fritz, J.E., et al. Alternariol acts as a topoisomerase poison, preferentially affecting the IIa isoform. Mol. Nutr. Food Res. 53(4), 441-451 (2008).

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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