

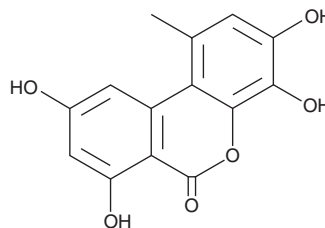
# PRODUCT INFORMATION



## 4-hydroxy Alternariol

Item No. 23636

**CAS Registry No.:** 959417-21-1  
**Formal Name:** 3,4,7,9-tetrahydroxy-1-methyl-6H-dibenzo[b,d]pyran-6-one  
**Synonym:** 4-hydroxy AOH  
**MF:** C<sub>14</sub>H<sub>10</sub>O<sub>6</sub>  
**FW:** 274.2  
**Purity:** ≥95%  
**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

4-hydroxy Alternariol is supplied as a solid. A stock solution may be made by dissolving the 4-hydroxy alternariol in the solvent of choice, which should be purged with an inert gas. 4-hydroxy Alternariol is soluble in organic solvents such as ethanol, methanol, DMSO, and dimethyl formamide.

### Description

4-hydroxy Alternariol is a metabolite of the mycotoxin alternariol (Item No. 11306) formed through cytochrome P450 (CYP450) metabolism. It increases reactive oxygen species (ROS) in KYSE510 human esophageal cells by 701% compared to control.<sup>2</sup> 4-hydroxy Alternariol increases topoisomerase II $\beta$ -DNA complexes by 208% compared to control in an ICE assay but does not induce DNA damage in KYSE510 cells. It completely inhibits topoisomerase II $\alpha$  activity at a concentration of 25  $\mu$ M under cell-free conditions.

### References

1. Pfeiffer, E., Burkhardt, B., Altemöller, M., *et al.* Activities of human recombinant cytochrome P450 isoforms and human hepatic microsomes for the hydroxylation of Alternaria toxins. *Mycotoxin Res.* **24**(3), 117-123 (2008).
2. Tiessen, C., Ellmer, D., Mikula, H., *et al.* Impact of phase I metabolism on uptake, oxidative stress and genotoxicity of the emerging mycotoxin alternariol and its monomethyl ether in esophageal cells. *Arch. Toxicol.* **91**(3), 1213-1226 (2017).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

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