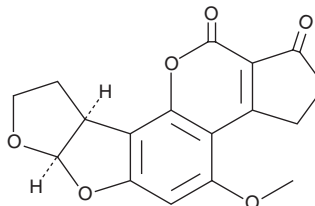


# PRODUCT INFORMATION



## Aflatoxin B<sub>2</sub> Item No. 11294

**CAS Registry No.:** 7220-81-7  
**Formal Name:** 2,3,6aR,8,9,9aS-hexahydro-4-methoxy-cyclopenta[c]furo[3',2':4,5]furo[2,3-h][1]benzopyran-1,11-dione  
**Synonyms:** AFB<sub>2</sub>, Dihydroaflatoxin B<sub>1</sub>  
**MF:** C<sub>17</sub>H<sub>14</sub>O<sub>6</sub>  
**FW:** 314.3  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 202, 220, 265, 363 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

Aflatoxin B<sub>2</sub> is supplied as a crystalline solid. A stock solution may be made by dissolving the aflatoxin B<sub>2</sub> in the solvent of choice which should be purged with an inert gas. Aflatoxin B<sub>2</sub> is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of aflatoxin B<sub>2</sub> in DMSO is approximately 12 mg/ml and approximately 20 mg/ml in DMF.

Aflatoxin B<sub>2</sub> is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, aflatoxin B<sub>2</sub> should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Aflatoxin B<sub>2</sub> has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Aflatoxin B<sub>2</sub> (AFB<sub>2</sub>) is a mycotoxin that has been found in *A. terricola*.<sup>1</sup> It induces hepatic autophagy and apoptosis in broiler chickens when administered at doses of 0.2, 0.4, and 0.8 mg/kg.<sup>2</sup> AFB<sub>2</sub> (0.5 and 1 mg/animal) also induces parenchymal cell hyperplasia in rats.<sup>3</sup>

### Reference

1. Moubasher, A.H., el-Kady, I.A., and Shoriet, A. Toxigenic *Aspergilli* isolated from different sources in Egypt. *Ann. Nutr. Aliment.* **31(4-6)**, 607-615 (1977).
2. Chen, B., Li, D., Li, M., et al. Induction of mitochondria-mediated apoptosis and PI3K/Akt/mTOR-mediated autophagy by aflatoxin B<sub>2</sub> in hepatocytes of broilers. *Oncotarget* **7(51)**, 84989-84998 (2016).
3. Wogan, G.N., Edwards, G.S., and Newberne, P.M. Structure-activity relationships in toxicity and carcinogenicity of aflatoxins and analogs. *Cancer Res.* **31(12)**, 1936-1942 (1971).

#### 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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