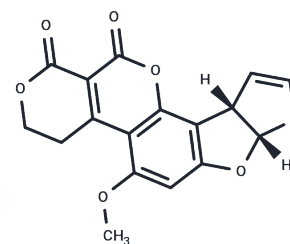


Aflatoxin G1

Chemical Properties

CAS No. :	1165-39-5
Formula:	C ₁₇ H ₁₂ O ₇
Molecular Weight:	328.27
Storage:	Powder: -20°C for 3 years In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.



Biological Description

Description	Aflatoxin G1 is a mycotoxin produced by <i>Aspergillus flavus</i> and <i>Aspergillus parasiticus</i> , which is hepatotoxic, teratogenic, immunosuppressive, and carcinogenic, and is mainly found in contaminated cereals. Aflatoxin G1 inhibits RNA polymerase activity, affects RNA and protein synthesis, and causes damage to the liver and kidney.
Targets(IC50)	Apoptosis, NF-κB, Antibacterial, Antibiotic, Parasite, COX, Cytochromes P450, Interleukin, JNK, p38 MAPK, ROS, TNF
In vitro	Aflatoxin G1 was removed from liquid cultures by growing and resting cells of <i>Flavobacterium aurantiacum</i> NRRL B-184. In inoculated culture media containing toxin levels of 7.5 p.p.m. and above, there was a protracted growth lag which was subsequently overcome; toxin removal then occurred, concomitant with growth. Only a few cells demonstrated aberrant morphological forms when cultured in the presence of Aflatoxin G1. A comparison of the effects of Aflatoxin G1 with B1 on growth and morphology showed that B1 was distinctly more toxic[1]

Solubility Information

Solubility	DMSO: 8 mg/mL (24.37 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0463 mL	15.2314 mL	30.4627 mL
5 mM	0.6093 mL	3.0463 mL	6.0925 mL
10 mM	0.3046 mL	1.5231 mL	3.0463 mL
50 mM	0.0609 mL	0.3046 mL	0.6093 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Aflatoxin G1 uptake by cells of *Flavobacterium aurantiacum*. Canadian Journal of Microbiology, 1967, 13(6):629.
Zamir-Nasta T, et al. Aflatoxin G1 exposure altered the expression of BDNF and GFAP, histopathological of brain tissue, and oxidative stress factors in male rats. Res Pharm Sci. 2022 Oct 29;17(6):677-685.

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