



Product Information

Product ID C3479

CAS No. 518-75-2

Chemical Name

Synonym

Formula $C_{13}H_{14}O_5$

Formula Wt. 250.249

Melting Point 175°C (dec.)

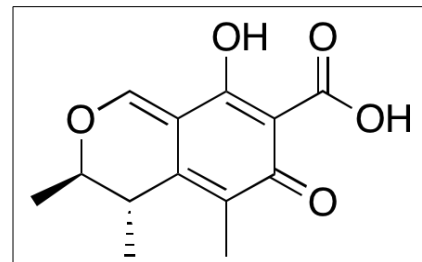
Purity ≥98%

Solubility

Store Temp 4°C

Ship Temp Ambient

Description Citrinin is a mycotoxin initially produced by *Penicillium*, *Aspergillus*, and *Monascus*. Citrinin exhibits cytotoxic, cardiotoxic, nephrotoxic, and pro-oxidative activities. In Leydig cells, citrinin inhibits testosterone production and induces caspase-mediated apoptosis. In embryos, citrinin alters heart morphology, causing malformations, edema, and red cell accumulation. Additionally, citrinin increases membrane permeability in mitochondria, increasing generation of ROS and superoxide anions.



Bulk quantities available upon request

Product ID	Size
C3479	1 mg
C3479	5 mg
C3479	10 mg

References Wu TS, Yang JJ, Yu FY, et al. Cardiotoxicity of mycotoxin citrinin and involvement of microRNA-138 in zebrafish embryos. *Toxicol Sci.* 2013 Dec;136(2):402-12. PMID: 24052562.

Liu S, Wang D, Zhang J, et al. Citrinin reduces testosterone secretion by inducing apoptosis in rat Leydig cells. *Toxicol In Vitro.* 2012 Sep;26(6):856-61. PMID: 22564900.

Flajs D, Peraica M. Toxicological properties of citrinin. *Arh Hig Rada Toksikol.* 2009 Dec;60(4):457-64. PMID: 20061247.

Da Lozzo EJ, Oliveira MB, Carnieri EG. Citrinin-induced mitochondrial permeability transition. *J Biochem Mol Toxicol.* 1998;12(5):291-7. PMID: 9664235.

Ribeiro SM, Chagas GM, Campello AP, et al. Mechanism of citrinin-induced dysfunction of mitochondria. V. Effect on the homeostasis of the reactive oxygen species. *Cell Biochem Funct.* 1997 Sep;15(3):203-9. PMID: 9377799.

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