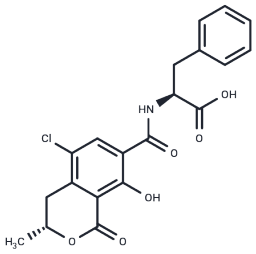
Data Sheet (Cat.No.T75659)

TargetMol

Ochratoxin A

Chemical Properties



CAS No. : 303-47-9

Formula: C20H18ClNO6

Molecular Weight: 403.81

Storage: Keep away from direct sunlight
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	Ochratoxin A belongs to the class of mycotoxins primarily produced by species of the Aspergillus and Penicillium genera. Ochratoxin A possesses significant nephrotoxicity, immunotoxicity, teratogenicity, and carcinogenic potential, with biochemical mechanisms involving the induction of intracellular free radicals and severe oxidative damage.
Targets(IC50)	Endogenous Metabolite,Antibiotic
In vitro	In vitro, studies using rat hepatocytes, mitochondria, and microsomes demonstrate that Ochratoxin A and its analogs induce the generation of free radicals (such as ROS). This pro-oxidant activity leads to significant lipid peroxidation, mitochondrial dysfunction, and cellular membrane damage [1].

Solubility Information

Solubility	DMSO: 40 mg/mL (99.06 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.4764 mL	12.3821 mL	24.7641 mL
5 mM	0.4953 mL	2.4764 mL	4.9528 mL
10 mM	0.2476 mL	1.2382 mL	2.4764 mL
50 mM	0.0495 mL	0.2476 mL	0.4953 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

Hoehler D, et al. Induction of free radicals in hepatocytes, mitochondria and microsomes of rats by ochratoxin A and its analogs. Biochim Biophys Acta. 1997 Jun 27;1357(2):225-33.

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