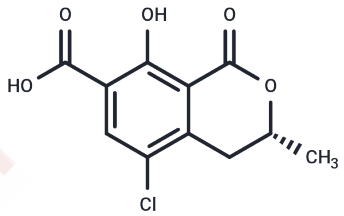
# Data Sheet (Cat.No.T39339)

TargetMol

## Ochratoxin α

### Chemical Properties




CAS No. : 19165-63-0

Formula: C11H9ClO5

Molecular Weight: 256.64

Storage: Store at low temperature,Keep away from direct sunlight,Keep away from moisture
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 α (Ochratoxin alpha) is a degradation product of Ochratoxin A, used for studying Ochratoxin A degradation. |
| Targets(IC50) | Drug Metabolite |
| In vitro | The ROS level of Ochratoxin α (200-400 nM, 48 h) LX-2 cells was significantly increased, and the cell viability was decreased. [1]<br>Ochratoxin α (2.0 μg/ml) significantly induced NLRP3 inflammasome activation and Caspase-1-dependent pyrodeath. The expression of proinflammatory cytokines (IL-6, TNF-α) and pyrogenic genes (GSDMD, IL-1β, IL-18) was increased and the secretion of MDCK cells was increased. [2] |
| In vivo | Ochratoxin α (200 and 1000 μg/kg orally) induced liver fibrosis in mice. [1]<br>Mice with Ochratoxin α(1.0 and 2.0 mg/kg, intrabitoneal injection, once every two days for 14 days) showed renal histological injury and abnormal expression of renal fibrosis molecules (α-SMA, vimentin, TGF-β). Nod-like receptor protein 3 (NLRP3) inflammasome is activated and induces pyrodeath. [2] |

### Solubility Information

| | |
|---|---|
| Solubility | DMSO: 120 mg/mL (467.58 mM),Sonication is recommended.<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |
| In vivo Formulation | 10% DMSO+40% PEG300+5% Tween-80+45% Saline: 5 mg/mL (19.48 mM),Sonication is recommended.<br>*Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.* |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 3.8965 mL | 19.4825 mL | 38.9651 mL |
| 5 mM | 0.7793 mL | 3.8965 mL | 7.793 mL |
| 10 mM | 0.3897 mL | 1.9483 mL | 3.8965 mL |
| 50 mM | 0.0779 mL | 0.3897 mL | 0.7793 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

Chae SA, et al. Ochratoxin a induces hepatic fibrosis through TGF-β receptor I/Smad2/3 signaling pathway. Environ Toxicol. 2022 Aug;37(8):2084-2095.

Li H, et al. Ochratoxin A induces nephrotoxicity in vitro and in vivo via pyroptosis. Arch Toxicol. 2021 Apr;95(4): 1489-1502.