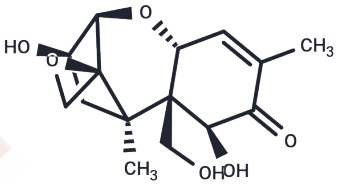
Data Sheet (Cat.No.T15097)

TargetMol

Deoxynivalenol

Chemical Properties



CAS No. : 51481-10-8

Formula: C15H20O6

Molecular Weight: 296.32

Storage: Store at low temperature,Keep away from moisture,
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	Deoxynivalenol (Vomitoxin) is a mycotoxin produced by Fusarium spp. of the single trichothecene family and is commonly found in contaminated food and feed. Deoxynivalenol crosses the intestinal mucosa via a cellular bypass at the tight junctions. Deoxynivalenol transporters are unaffected by inhibitors of P-glycoprotein (PgP) or multidrug resistance-associated protein (MRP). Deoxynivalenol commonly causes diarrhea, vomiting, and gastrointestinal inflammation in humans and animals.
Targets(IC50)	Others

Solubility Information

Solubility	DMSO: 260 mg/mL (877.43 mM),Sonication is recommended. (< 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 (16.87 mM),Sonication is recommended. *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	3.3747 mL	16.8737 mL	33.7473 mL
5 mM	0.6749 mL	3.3747 mL	6.7495 mL
10 mM	0.3375 mL	1.6874 mL	3.3747 mL
50 mM	0.0675 mL	0.3375 mL	0.6749 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

Sergent T, et al. Deoxynivalenol transport across human intestinal Caco-2 cells and its effects on cellularmetabolism at realistic intestinal concentrations. Toxicol Lett. 2006 Jul 1;164(2):167-76.