Data Sheet (Cat.No.T19175)

TargetMol

Acetaminophen metabolite 3-hydroxy-acetaminophen

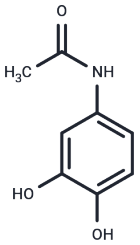
Chemical Properties

CAS No. : 37519-14-5

Formula: C8H9NO3

Molecular Weight: 167.16

Storage: Store at low temperature
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	Acetaminophen metabolite 3-hydroxy-acetaminophen is a non-toxic microsomal metabolite of acetaminophen, suitable for metabolic studies. It functions as an antioxidant, exhibiting radical scavenging activity via its phenolic hydroxyl group to mitigate oxidative damage.
Targets(IC50)	Drug Metabolite
In vitro	In in vitro experiments, the Acetaminophen metabolite 3-hydroxy-acetaminophen can scavenge free radicals through the electron donor properties of its phenolic hydroxyl group, thereby exerting antioxidant effects and reducing cellular oxidative damage [2].

Solubility Information

Solubility	DMSO: 200 mg/mL (1196.46 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 (29.91 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	5.9823 mL	29.9115 mL	59.8229 mL
5 mM	1.1965 mL	5.9823 mL	11.9646 mL
10 mM	0.5982 mL	2.9911 mL	5.9823 mL
50 mM	0.1196 mL	0.5982 mL	1.1965 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

Hazai E, et al. Reduction of toxic metabolite formation of acetaminophen. Biochem Biophys Res Commun. 2002 Mar 8;291(4):1089-94.

Borges, et al. A theoretical study for oxidative metabolism of acetaminophen. Journal of Computational and Theoretical Nanoscience 7.10 (2010): 1968-1972.