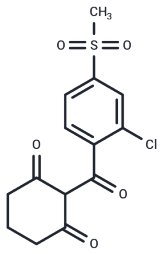
Data Sheet (Cat.No.T16951)

TargetMol

Sulcotrione

Chemical Properties



CAS No. : 99105-77-8

Formula: C14H13ClO5S

Molecular Weight: 328.77

Storage: 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	Sulcotrione is a β-triketone herbicide. It also can inhibit hydroxyphenylpyruvate dioxygenase.
Targets(IC50)	Reactive Oxygen Species,ROS
In vitro	Sulcotrione behaves as time-independent reversible inhibitor. However it is the first time that such behavior is observed using a purified hydroxyphenylpyruvate dioxygenase and a synthetic β-triketone, namely sulcotrione. Inhibition kinetic analysis, performing with 3 hydroxyphenylpyruvate and sulcotrione concentrations, show that the apparent KM increasing with sulcotrione concentration [1].

Solubility Information

Solubility	DMSO: 100 mg/mL (304.16 mM),Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (12.17 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	3.0416 mL	15.2082 mL	30.4164 mL
5 mM	0.6083 mL	3.0416 mL	6.0833 mL
10 mM	0.3042 mL	1.5208 mL	3.0416 mL
50 mM	0.0608 mL	0.3042 mL	0.6083 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

Rocaboy-Faquet E, et al. A novel amperometric biosensor for ?-triketone herbicides based on hydroxyphenylpyruvatedioxygenase inhibition: A case study for sulcotrione. Talanta. 2016;146:510-6.