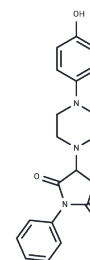


Malic enzyme inhibitor ME1

Chemical Properties

CAS No. :	522649-59-8
Formula:	C20H21N3O3
Molecular Weight:	351.4
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	Malic enzyme inhibitor ME1 (ME1) is a specific inhibitor of Malic enzyme (IC ₅₀ = 0.15 μM). Malic enzyme inhibitor ME1 reduces cell viability/metabolic activity.
Targets(IC ₅₀)	Others,Fatty Acid Synthase
In vitro	In HCT116 cells and HT29 cells, Malic enzyme inhibitor ME1 (50 μM) significantly reduces the total number of cells and cell colonies in a dose-dependent manner. In MTS cells, Malic enzyme inhibitor ME1 decreases the viability and metabolic activities of cells[2].

Solubility Information

Solubility	DMSO: 250 mg/mL (711.44 mM),Sonication and heating to 60°C 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: 3.3 mg/mL (9.39 mM),Sonication is recommended. <i>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.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.8458 mL	14.2288 mL	28.4576 mL
5 mM	0.5692 mL	2.8458 mL	5.6915 mL
10 mM	0.2846 mL	1.4229 mL	2.8458 mL
50 mM	0.0569 mL	0.2846 mL	0.5692 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

Zhang YJ, et al. In silico design and synthesis of piperazine-1-pyrrolidine-2,5-dione scaffold-based novel malic enzyme inhibitors. *Bioorg Med Chem Lett*. 2006 Feb;16(3):525-8. Epub 2005 Nov 8.

Fernandes L, et al. Malic Enzyme 1 (ME1) is pro-oncogenic in ApcMin/+ mice. *Sci Rep*. 2018 Sep 24;8(1):14268.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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