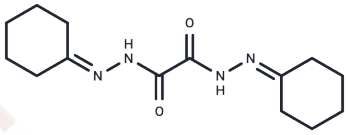
Data Sheet (Cat.No.T65013)

TargetMol

Cuprizone

Chemical Properties



CAS No. : 370-81-0

Formula: C14H22N4O2

Molecular Weight: 278.35

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	Cuprizone is a copper chelator.Cuprizone is used to induce schizophrenia in mice. Cuprizone induces oligodendrocyte death and induces a demyelination response.
Targets(IC50)	Others,Hydroxylase

Solubility Information

Solubility	DMSO: 7.81 mg/mL (28.06 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	1% CMC-Na: 38 mg/mL (136.52 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	3.5926 mL	17.963 mL	35.926 mL
5 mM	0.7185 mL	3.5926 mL	7.1852 mL
10 mM	0.3593 mL	1.7963 mL	3.5926 mL
50 mM	0.0719 mL	0.3593 mL	0.7185 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

Suzuki K, et al. Status spongiosus of CNS and hepatic changes induced by cuprizone (biscyclohexanone oxalyldihydrazone). Am J Pathol. 1969 Feb;54(2):307-25.
Sanadgol N, et al. Alpha-lipoic acid mitigates toxic-induced demyelination in the corpus callosum by lessening of oxidative stress and stimulation of polydendrocytes proliferation. Metab Brain Dis. 2018 Feb;33(1):27-37.
M Jake Pushie, et al. Synthesis and structural characterization of copper-cuprizone complexes. Dalton Trans. 2022 Jun 29.
Haiyun Xu, et al. Behavioral and neurobiological changes in C57BL/6 mouse exposed to cuprizone: effects of antipsychotics. Front Behav Neurosci. 2010 Mar 18;4:8.

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