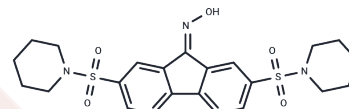


CIL56

## Chemical Properties

CAS No. : 300802-28-2  
 Formula: C<sub>23</sub>H<sub>27</sub>N<sub>3</sub>O<sub>5</sub>S<sub>2</sub>  
 Molecular Weight: 489.61  
 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	CIL56 (CA3) is a small molecule that induces cellular ferroptosis through the production of iron-dependent reactive oxygen species (ROS). It also induces accumulation of long-chain saturated, monounsaturated, and polyunsaturated fatty acids in HT-1080 cells in vitro. HT-1080 cells lacking acetyl-CoA carboxylase 1 (ACC1), the rate-limiting enzyme in fatty acid synthesis, exhibit 5-fold resistance to CIL56 treatment, indicating ACC1 activity sensitizes cells to CIL56-induced cell death.
Targets(IC50)	Ferroptosis, ROS

## Solubility Information

Solubility	DMSO: 6.94 mg/mL (14.17 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0424 mL	10.2122 mL	20.4244 mL
5 mM	0.4085 mL	2.0424 mL	4.0849 mL
10 mM	0.2042 mL	1.0212 mL	2.0424 mL
50 mM	0.0408 mL	0.2042 mL	0.4085 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

- Yang WS, et al. Ferroptosis: Death by Lipid Peroxidation. Trends Cell Biol. 2016 Mar;26(3):165-176.
- Li P, Lin Q, Sun S, et al. Inhibition of cannabinoid receptor type 1 sensitizes triple-negative breast cancer cells to ferroptosis via regulating fatty acid metabolism. Cell Death & Disease. 2022, 13(9): 1-15.
- Shimada K, et al. Global survey of cell death mechanisms reveals metabolic regulation of ferroptosis. Nat Chem Biol. 2016 Jul;12(7):497-503.
- Ni W, Yu M, Yang R, et al. The YAP1-MAML2 fusion drives tumorigenesis and sustains tumor growth. Molecular Therapy Oncology. 2024
- Effects of YAP Inhibitors and Activators on the Growth of Leukemia Cells[J]. Anticancer Research, 2025, 45(3): 977-987.
- Dixon SJ, et al. Human Haploid Cell Genetics Reveals Roles for Lipid Metabolism Genes in Nonapoptotic Cell Death. ACS Chem Biol. 2015 Jul 17;10(7):1604-9.

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