SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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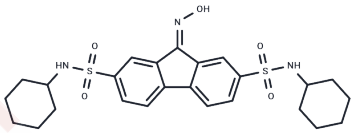
Data Sheet (Cat.No.T4066)

TargetMol

FIN56

Chemical Properties



CAS No. : 1083162-61-1

Formula: C25H31N3O5S2

Molecular Weight: 517.66

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	FIN56 is a specific inducer of ferroptosis.
Targets(IC50)	Ferroptosis
In vitro	FIN56 triggers ferroptosis through a mechanism involving the regulation of GPX4 protein abundance. FIN56 causes the loss of GPX4 activity in cell lysates. FIN56-induced cell death is suppressed by GFP-GPX4 fusion protein overexpression.
Cell Research	1000 cells/36 μL are seeded in each well in 384-well plates. Lethal compounds are dissolved and a 2-fold, 12-point dilution series are prepared in DMSO. Compound solutions are further diluted with media at 1:25 and 4 μL/well of the diluted solutions are added to cell cultures immediately after cells are seeded. When ferroptosis inhibitors (100 μM α-tocopherol, 152 μM deferoxamine, or 10 μM U-0126) are co-treated with lethal inducers, they are supplemented to cell culture at the same time as lethal compounds are added, and the cells are incubated for 24 hrs. When other cell death modulating compounds (100 nM sodium selenite, 1 μM cerivastatin, 100 μg/mL mevalonic acid) are co-treated, they are first supplemented to cell culture for 24 hrs before lethal compounds are added to cell culture and further incubated for 24 hrs at 37°C under 5% CO2. On the day of the viability measurement, 10 μL/well of 50% Alamar Blue diluted in media is added and further incubated at 37°C for 6 hrs. Fluorescence intensity (ex/em: 530/590) is measured with a Victor 3 plate reader and the normalized viability is calculated by VL = (IL-I0)/(IV-I0), where VL, I0, IV, and IL are the normalized viability, raw fluorescence intensities from the wells containing media, cells treated with a vehicle (negative control), and cells with the lethal compound (L), respectively. When the effect of a chemical modulator (M) on L is calculated, we instead used the equation: VL|M = (IM, L-I0)/(IM, V-I0), where VL|M, IM, L and IM, V are the normalized viability, and fluorescence intensity from cells treated with M and V, and from cells with M and L. respectively. The viability is typically measured in biological triplicates unless otherwise specified. A representative dose-response curve, the mean and standard error of normalized viability from one replicate are plotted.

Solubility Information

Solubility	DMSO: 50 mg/mL (96.59 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9318 mL	9.6588 mL	19.3177 mL
5 mM	0.3864 mL	1.9318 mL	3.8635 mL
10 mM	0.1932 mL	0.9659 mL	1.9318 mL
50 mM	0.0386 mL	0.1932 mL	0.3864 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.

Reference

Yan B, Ai Y, Sun Q, et al. Membrane Damage during Ferroptosis Is Caused by Oxidation of Phospholipids Catalyzed by the Oxidoreductases POR and CYB5R1. Molecular Cell. 2020
Shimada K, et al. Global survey of cell death