ROS-generating agent 1

Cat. No.: HY-149265

CAS No.: 2369030-41-9

Molecular Formula: $C_{21}H_{15}F_6NO$

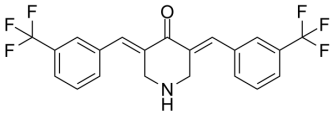
Molecular Weight: 411.34

Target: Reactive Oxygen Species; TrxR; Ferroptosis; Apoptosis

Pathway: Immunology/Inflammation; Metabolic Enzyme/Protease; NF-κB; Apoptosis

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 33.33 mg/mL (81.03 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.4311 mL	12.1554 mL	24.3108 mL
5 mM	0.4862 mL	2.4311 mL	4.8622 mL
10 mM	0.2431 mL	1.2155 mL	2.4311 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

ROS-generating agent 1 (Compound 2c) covalently modifies the Sec-498 residue of TrxR to generate ROS. ROS-generating agent 1 reduces intracellular TrxR protein level. ROS-generating agent 1 results in ROS-dependent apoptosis and ferroptosis of NCI-H460 cells. ROS-generating agent 1 has anti-cancer activities[1].

REFERENCES

[1]. Liu X, et al. Tumor killing by a dietary curcumin mono-carbonyl analog that works as a selective ROS generator via TrxR inhibition. Eur J Med Chem. 2023 Mar 15;250:115191.

Caution: Product has not been fully validated for medical applications. For research use only.

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