

## GIC-20

## Chemical Properties

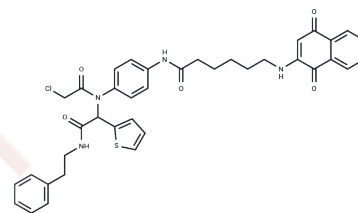
CAS No. : 2942242-60-4

Formula: C<sub>38</sub>H<sub>37</sub>ClN<sub>4</sub>O<sub>5</sub>S

Molecular Weight: 697.24

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	GIC-20, a dual inducer of apoptosis and ferroptosis, exhibits antitumor efficacy against fibrosarcoma [1].
Targets(IC50)	Apoptosis, Ferroptosis
In vitro	GIC-20, when used at 1 $\mu$ M for 48 hours, inhibits the proliferation and migration of HT1080 fibrosarcoma cells, exhibiting cytotoxicity with an IC <sub>50</sub> of 1.6 $\mu$ M [1]. At concentrations of 0.5-4 $\mu$ M for 24 hours, GIC-20 induces ferroptosis by increasing intracellular lipid peroxides and ROS accumulation or degrading GPX4 [1]. Additionally, GIC-20 at 0-1 $\mu$ M for 24 hours reduces cell viability in resistant MIA-PaCa-2-AMG510R cells, increasing their sensitivity to AMG510 [1]. In HT1080 cells, Western Blot analysis shows that GIC-20 at 0-4 $\mu$ M for 24 hours inhibits GPX4 and Bcl-2 expression while promoting Bax expression. Apoptosis analysis further reveals that GIC-20 at 0-4 $\mu$ M for 24 hours induces apoptosis in a dose-dependent manner.
In vivo	GIC-20, administered at 20-40 mg/kg via intraperitoneal injection daily for 19 days, demonstrates antitumor activity in HT1080 xenograft BALB/c mice without significant toxicity to major organs [1]. In this animal model, a dosage of 40 mg/kg resulted in a tumor growth inhibition (TGI) of 63%, while preserving organ morphology with no apparent inflammatory response, edema, or necrosis.

### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	1.4342 mL	7.1711 mL	14.3423 mL
5 mM	0.2868 mL	1.4342 mL	2.8685 mL
10 mM	0.1434 mL	0.7171 mL	1.4342 mL
50 mM	0.0287 mL	0.1434 mL	0.2868 mL

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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.

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Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481