



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

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### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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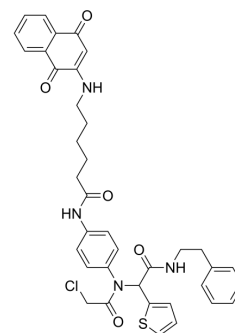
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## GIC-20

<b>Cat. No.:</b>	HY-162449
<b>CAS No.:</b>	2942242-60-4
<b>Molecular Formula:</b>	C <sub>38</sub> H <sub>37</sub> ClN <sub>4</sub> O <sub>5</sub> S
<b>Molecular Weight:</b>	697.24
<b>Target:</b>	Apoptosis; Ferroptosis
<b>Pathway:</b>	Apoptosis
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



## BIOLOGICAL ACTIVITY

Description	GIC-20 is a dual inducer for apoptosis and ferroptosis. GIC-20 exhibits antitumor efficacy against fibrosarcoma <sup>[1]</sup> .																
<b>In Vitro</b>	<p>GIC-20 (1 μM, 48 h) inhibits proliferation and migration of GIC HT1080 fibrosarcoma cells, exhibits cytotoxicity with IC<sub>50</sub> of 1.6 μM<sup>[1]</sup>.</p> <p>GIC-20 (0.5-4 μM, 24 h) induces ferroptosis by inducing intracellular lipid peroxide and ROS accumulation, or by degradation of GPX4<sup>[1]</sup>.</p> <p>GIC-20 (0-1 μM, 24 h) inhibits cell viability of drug-resistant MIA-PaCa-2-AMG510R cells, enhances the sensitivity of MIA-PaCa-2-AMG510R cells to AMG510<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>HT1080</td> </tr> <tr> <td>Concentration:</td> <td>0-4 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Inhibited expression of GPX4 and Bcl-2, promoted expression of Bax.</td> </tr> </table> <p>Apoptosis Analysis<sup>[1]</sup></p> <table border="1"> <tr> <td>Cell Line:</td> <td>HT1080</td> </tr> <tr> <td>Concentration:</td> <td>0-4 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>24 h</td> </tr> <tr> <td>Result:</td> <td>Induced apoptosis in a dose-dependent manner.</td> </tr> </table>	Cell Line:	HT1080	Concentration:	0-4 μM	Incubation Time:	24 h	Result:	Inhibited expression of GPX4 and Bcl-2, promoted expression of Bax.	Cell Line:	HT1080	Concentration:	0-4 μM	Incubation Time:	24 h	Result:	Induced apoptosis in a dose-dependent manner.
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<b>In Vivo</b>	<p>GIC-20 (20-40 mg/kg, i.p., once daily for 19 days) exhibits antitumor efficacy in HT1080 xenograft BALB/c mice, without significant toxicity in major organs<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>HT1080 xenograft BALB/c mice<sup>[1]</sup></td> </tr> </table>	Animal Model:	HT1080 xenograft BALB/c mice <sup>[1]</sup>														
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Dosage:	20-40 mg/kg
Administration:	i.p., once a day for 19 days
Result:	Inhibited tumor growth, with a TGI of 63% at 40 mg/kg. Maintained a complete morphology without obvious cellular inflammatory, oedema, or necrosis in major organs.

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## REFERENCES

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[1]. Ma F, et al., ML162 derivatives incorporating a naphthoquinone unit as ferroptosis/apoptosis inducers: Design, synthesis, anti-cancer activity, and drug-resistance reversal evaluation. *Eur J Med Chem.* 2024 Apr 15;270:116387.

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

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