



# 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

### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

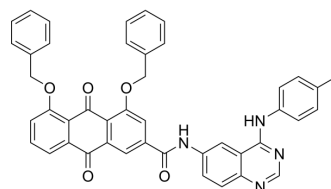
[mail@szabo-scandic.com](mailto:mail@szabo-scandic.com)

[www.szabo-scandic.com](http://www.szabo-scandic.com)

[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

## GLUT1/EGFR-IN-1

<b>Cat. No.:</b>	HY-163726
<b>CAS No.:</b>	2393787-80-7
<b>Molecular Formula:</b>	C <sub>44</sub> H <sub>32</sub> N <sub>4</sub> O <sub>5</sub>
<b>Molecular Weight:</b>	696.75
<b>Target:</b>	GLUT1; EGFR; Apoptosis
<b>Pathway:</b>	Membrane Transporter/Ion Channel; JAK/STAT Signaling; Protein Tyrosine Kinase/RTK; Apoptosis
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	GLUT1/EGFR-IN-1 (compound H) is a potent inhibitor of GLUT1 and EGFR. GLUT1/EGFR-IN-1 can simultaneously act on the EGFR tyrosine kinase ATP-binding site and inhibit GLUT1-mediated energy metabolism, resulting in reductions in ATP, MMP, intra-cellular lactic acid, and EGFR nuclear transfer. GLUT1/EGFR-IN-1 can be used for nasopharyngeal carcinoma (NPC) and triple-negative breast cancer (TNBC) research <sup>[1]</sup> .									
<b>IC<sub>50</sub> &amp; Target</b>	GLUT1	EGFR								
<b>In Vitro</b>	<p>GLUT1/EGFR-IN-1 (compound H) showed outstanding antitumour activity in CNE1 and MDA-MB231 cells, with IC<sub>50</sub> values lower than 3 μmol/L, but activity was not obvious in CNE2 cells<sup>[1]</sup>.</p> <p>GLUT1/EGFR-IN-1 (0-4 μM, 48 h) inhibits the expression of EGFR and p-EGFR in both CNE1 and MDA-MB231 cells<sup>[1]</sup>.</p> <p>GLUT1/EGFR-IN-1 (0-4 μM, 48 h) induces apoptosis in CNE1 and MDA-MB231 cells<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>CNE1 and MDA-MB231 cells</td> </tr> <tr> <td>Concentration:</td> <td>1 μmol/L, 2, 4 μmol/L</td> </tr> <tr> <td>Incubation Time:</td> <td>48 h</td> </tr> <tr> <td>Result:</td> <td>Depressed the expression of EGFR-, p-EGFR- and GLUT1-mediated glycolysis-related proteins.</td> </tr> </table>		Cell Line:	CNE1 and MDA-MB231 cells	Concentration:	1 μmol/L, 2, 4 μmol/L	Incubation Time:	48 h	Result:	Depressed the expression of EGFR-, p-EGFR- and GLUT1-mediated glycolysis-related proteins.
Cell Line:	CNE1 and MDA-MB231 cells									
Concentration:	1 μmol/L, 2, 4 μmol/L									
Incubation Time:	48 h									
Result:	Depressed the expression of EGFR-, p-EGFR- and GLUT1-mediated glycolysis-related proteins.									
<b>In Vivo</b>	<p>GLUT1/EGFR-IN-1 (compound H) (4-8 mg/kg, IP, for two weeks) inhibits the growth of the MDA-MB231-transplanted tumour cells in a nude mice model<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>BALB/c-neu female mice (Four- to five-week-old, n=5)<sup>[1]</sup></td> </tr> <tr> <td>Dosage:</td> <td>4, 8 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>IP, for two weeks</td> </tr> </table>		Animal Model:	BALB/c-neu female mice (Four- to five-week-old, n=5) <sup>[1]</sup>	Dosage:	4, 8 mg/kg	Administration:	IP, for two weeks		
Animal Model:	BALB/c-neu female mice (Four- to five-week-old, n=5) <sup>[1]</sup>									
Dosage:	4, 8 mg/kg									
Administration:	IP, for two weeks									

---

Result:	Inhibited the growth of the MDA-MB231 transplanted tumour model in nude mice.
---------	---

## REFERENCES

---

[1]. Wang C, et al. Targeted blocking of EGFR and GLUT1 by compound H reveals a new strategy for treatment of triple-negative breast cancer and nasopharyngeal carcinoma. Eur J Pharm Sci. 2024 Jul 1;198:106789.

---

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA