



# SZABO SCANDIC

Part of Europa Biosite

## Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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### Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

### Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

### SZABO-SCANDIC HandelsgmbH

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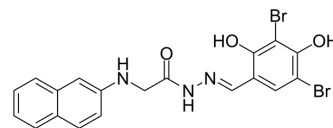
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## GlyH-101

|                    |                                                                                                                                                                                |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cat. No.:          | HY-18336                                                                                                                                                                       |
| CAS No.:           | 328541-79-3                                                                                                                                                                    |
| Molecular Formula: | C <sub>19</sub> H <sub>15</sub> Br <sub>2</sub> N <sub>3</sub> O <sub>3</sub>                                                                                                  |
| Molecular Weight:  | 493.15                                                                                                                                                                         |
| Target:            | CFTR                                                                                                                                                                           |
| Pathway:           | Membrane Transporter/Ion Channel                                                                                                                                               |
| Storage:           | <div> <div>Powder</div> <div>-20°C    3 years</div> <div>4°C    2 years</div> </div> <div> <div>In solvent</div> <div>-80°C    2 years</div> <div>-20°C    1 year</div> </div> |



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 58 mg/mL (117.61 mM)  
 \* "≥" means soluble, but saturation unknown.

|                           | Solvent<br>Concentration | Mass      |            |            |
|---------------------------|--------------------------|-----------|------------|------------|
|                           |                          | 1 mg      | 5 mg       | 10 mg      |
| Preparing Stock Solutions | 1 mM                     | 2.0278 mL | 10.1389 mL | 20.2778 mL |
|                           | 5 mM                     | 0.4056 mL | 2.0278 mL  | 4.0556 mL  |
|                           | 10 mM                    | 0.2028 mL | 1.0139 mL  | 2.0278 mL  |

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

#### In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
 Solubility: ≥ 2.5 mg/mL (5.07 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

GlyH-101 is a potent CFTR inhibitor. GlyH-101 also is a potent and reversible inhibitor of the VSORC conductance. GlyH-101 shows antiproliferative activity. GlyH-101 inhibits CFTR-like current and VSORC current<sup>[1][2]</sup>.

#### In Vitro

GlyH-101 (0-50 μM) shows antiproliferative activity in PCT and PS120 cells<sup>[1]</sup>.  
 GlyH-101 (0.5, 1, 5, 10 μM) inhibits CFTR-like current in a concentration-dependent manner in PCT cells<sup>[1]</sup>.  
 GlyH-101 (0.5, 1, 5, 10 μM) inhibits the VSORC current with IC<sub>50</sub>s of 5.38, 6.26 μM for PS120, PCT cells, respectively<sup>[1]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.  
 Cell Viability Assay<sup>[1]</sup>

|            |                  |
|------------|------------------|
| Cell Line: | PCT, PS120 cells |
|------------|------------------|

|         |                                                                                                                                                                                                                           |                                                       |
|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------|
|         | Concentration:                                                                                                                                                                                                            | 0, 1, 5, 10, 20, 50 $\mu$ M                           |
|         | Incubation Time:                                                                                                                                                                                                          | 24 h                                                  |
|         | Result:                                                                                                                                                                                                                   | Inhibited the cell growth in a dose-dependent manner. |
| In Vivo | GlyH-101 (2.5 $\mu$ g) reduces by about 80% cholera toxin-induced intestinal fluid secretion in mouse <sup>[2]</sup> .<br>MCE has not independently confirmed the accuracy of these methods. They are for reference only. |                                                       |

## CUSTOMER VALIDATION

- J Biol Chem. 2019 Apr 19;294(16):6598-6611.
- Sci Rep. 2018 Apr 16;8(1):6028.
- bioRxiv. 2023 Feb 8.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

- [1]. Melis N, et al. Revisiting CFTR inhibition: a comparative study of CFTRinh -172 and GlyH-101 inhibitors. Br J Pharmacol. 2014 Aug;171(15):3716-27.
- [2]. Muanprasat C, et al. Discovery of glycine hydrazide pore-occluding CFTR inhibitors: mechanism, structure-activity analysis, and in vivo efficacy. J Gen Physiol. 2004 Aug;124(2):125-37.
- [3]. Muanprasat C, et al. Discovery of glycine hydrazide pore-occluding CFTR inhibitors: mechanism, structure-activity analysis, and in vivo efficacy. J Gen Physiol. 2004 Aug;124(2):125-37.
- [4]. Kelly M, et al. Cystic fibrosis transmembrane regulator inhibitors CFTR(inh)-172 and GlyH-101 target mitochondrial functions, independently of chloride channel inhibition. J Pharmacol Exp Ther. 2010 Apr;333(1):60-9.
- [5]. Barman PP, et al. Cardiac ion channel current modulation by the CFTR inhibitor GlyH-101. Biochem Biophys Res Commun. 2011 Apr 29;408(1):12-7.

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

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