



# 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)



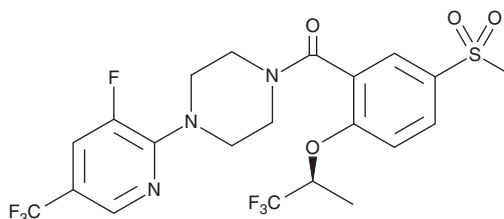
# PRODUCT INFORMATION



## Bitopertin

Item No. 19896

**CAS Registry No.:** 845614-11-1  
**Formal Name:** [4-[3-fluoro-5-(trifluoromethyl)-2-pyridinyl]-1-piperazinyl][5-(methanesulfonyl)-2-[(1S)-2,2,2-trifluoro-1-methylethoxy]phenyl]methanone  
**Synonyms:** RG-1678, RO-4917838  
**MF:** C<sub>21</sub>H<sub>20</sub>F<sub>7</sub>N<sub>3</sub>O<sub>4</sub>S  
**FW:** 543.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 243, 254, 299 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Bitopertin is supplied as a crystalline solid. A stock solution may be made by dissolving the bitopertin in the solvent of choice, which should be purged with an inert gas. Bitopertin is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of bitopertin in these solvents is approximately 5, 25, and 30 mg/ml, respectively.

Bitopertin is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, bitopertin should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Bitopertin has a solubility of approximately 0.25 mg/ml in a 1:12 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Bitopertin is an inhibitor of glycine transporter 1 (GlyT1; IC<sub>50</sub> = 0.03 μM).<sup>1</sup> It is selective for GlyT1 over GlyT2 (IC<sub>50</sub> = >30 μM) as well as a panel of 107 receptors, transporters, and enzymes at 10 μM.<sup>1,2</sup> Bitopertin (0.1 μM) increases long-term potentiation in rat hippocampal CA1 slices.<sup>2</sup> It reverses hyperlocomotion induced by the NMDA receptor partial agonist L-687,414 in mice (ID<sub>50</sub> = 0.5 mg/kg).<sup>1</sup>

### References

1. Pinard, E., Alanine, A., Alberati, D., *et al.* Selective GlyT1 inhibitors: Discovery of [4-(3-fluoro-5-trifluoromethylpyridin-2-yl)piperazin-1-yl][5-methanesulfonyl-2-((S)-2,2,2-trifluoro-1-methylethoxy)phenyl]methanone (RG1678), a promising novel medicine to treat schizophrenia. *J. Med. Chem.* **53**(12), 4603-4614 (2010).
2. Alberati, D., Moreau, J.-L., Lengyel, J., *et al.* Glycine reuptake inhibitor RG1678: A pharmacologic characterization of an investigational agent for the treatment of schizophrenia. *Neuropharmacology* **62**(2), 1152-1161 (2012).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/06/2022

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
[WWW.CAYMANCHEM.COM](http://WWW.CAYMANCHEM.COM)