



# 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) 

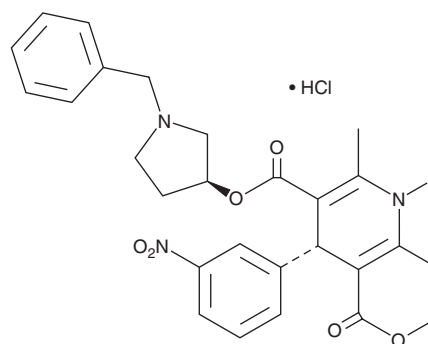
# PRODUCT INFORMATION



## Barnidipine (hydrochloride)

Item No. 20448

**CAS Registry No.:** 104757-53-1  
**Formal Name:** (4S)-3,5-pyridinedicarboxylic acid, 3-methyl 5-[(3S)-1-(phenylmethyl)-3-pyrrolidinyl] ester, monohydrochloride  
**Synonym:** YM-09730-5  
**MF:** C<sub>27</sub>H<sub>29</sub>N<sub>3</sub>O<sub>6</sub> • HCl  
**FW:** 528.0  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 217, 237, 356 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

Barnidipine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the barnidipine (hydrochloride) in the solvent of choice. Barnidipine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of barnidipine (hydrochloride) in ethanol is approximately 10 mg/ml and approximately 30 mg/ml in DMSO and DMF.

### Description

Barnidipine is a dihydropyridine calcium channel blocker that has an IC<sub>50</sub> value of 0.35 nM in potassium-induced tonic contraction of pig coronary artery.<sup>1</sup> It demonstrates antihypertensive activity by reducing peripheral vascular resistance. It decreases blood pressure in spontaneously hypertensive rats when administered orally at 1 and 3 mg/kg per day.<sup>2</sup> Formulations containing barnidipine have been used as a treatment for hypertension.

### References

1. Nakayama, K., Kashiwabara, T., Yamada, S., *et al.* Assessment in pig coronary artery of long-lasting and potent calcium antagonistic actions of the novel dihydropyridine derivative mepirodipine hydrochloride. *Arzneimittelforschung* **39(1)**, 50-55 (1989).
2. Kawashima, K., Toda, H., Oohata, H., *et al.* Antihypertensive and diuretic effects of YM-09730-5, a new calcium antagonist, in stroke-prone spontaneously hypertensive rats. *Gen. Pharmacol.* **22(2)**, 263-266 (1991).

#### 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, 03/01/2021

#### 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