



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

www.szabo-scandic.com

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

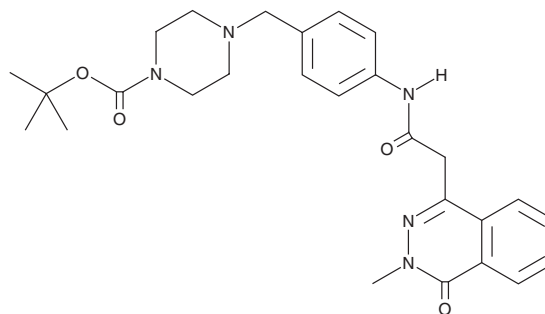
PRODUCT INFORMATION



PH-002

Item No. 27739

CAS Registry No.: 1311174-68-1
Formal Name: 4-[[4-[[2-(3,4-dihydro-3-methyl-4-oxo-1-phthalazinyl)acetyl]amino]phenyl]methyl]-1-piperazinecarboxylic acid, 1,1-dimethylethyl ester
MF: C₂₇H₃₃N₅O₄
FW: 491.6
Purity: ≥98%
UV/Vis.: λ_{max}: 248 nm
Supplied as: A 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

PH-002 is supplied as a solid. A stock solution may be made by dissolving the PH-002 in the solvent of choice, which should be purged with an inert gas. PH-002 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of PH-002 in ethanol and DMSO is approximately 10 mg/ml and approximately 15 mg/ml in DMF.

PH-002 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PH-002 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. PH-002 has a solubility of approximately 0.1 mg/ml in a 1:9 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PH-002 is an inhibitor of the interaction between the amino- and carboxy-terminal domains of apolipoprotein E4 (ApoE4; IC₅₀ = 116 nM in a FRET reporter assay for domain interaction).^{1,2} It restores intracellular trafficking of ApoE4 to the endoplasmic reticulum and Golgi apparatus in Neuro-2a cells expressing EGFP-ApoE4 or EGFP-ApoE4-R61T, a mutation that impairs ApoE4 domain interactions, when used at a concentration of 100 nM. PH-002 also prevents impairments in neurite outgrowth and dendritic spine development induced by expression of ApoE4 in Neuro-2a cells. It restores levels of mitochondrial complex IV subunit 1 in Neuro-2a cells expressing ApoE4 (EC₅₀ = 39 nM) and increases mitochondrial motility in PC12 cells expressing ApoE4 (EC₅₀ = <1 nM).¹

References

1. Chen, H.-K., Liu, Z., Meyer-Franke, A., *et al.* Small molecule structure correctors abolish detrimental effects of apolipoprotein E4 in cultured neurons. *J. Biol. Chem.* **287**(8), 5253-5266 (2012).
2. Brodbeck, J., McGuire, J., Liu, Z., *et al.* Structure-dependent impairment of intracellular apolipoprotein E4 trafficking and its detrimental effects are rescued by small-molecule structure correctors. *J. Biol. Chem.* **286**(19), 17217-17226 (2011).

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, 01/31/2020

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