



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

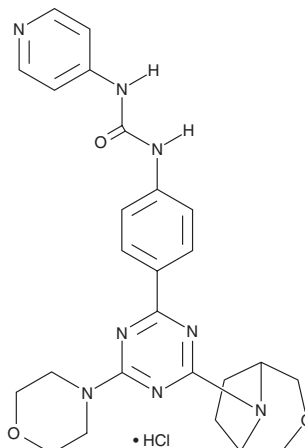
[linkedin.com/company/szaboscandic](https://www.linkedin.com/company/szaboscandic) 

PRODUCT INFORMATION

PKI-179 (hydrochloride)

Item No. 21202

CAS Registry No.: 1463510-35-1
Formal Name: N-[4-[4-(4-morpholinyl)-6-(3-oxa-8-azabicyclo[3.2.1]oct-8-yl)-1,3,5-triazin-2-yl]phenyl]-N'-4-pyridinyl-urea, monohydrochloride
MF: $C_{25}H_{28}N_8O_3 \cdot HCl$
FW: 525.0
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 228, 297 nm
Supplied as: A crystalline solid
Storage: $-20^\circ C$
Stability: ≥ 2 years



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

Laboratory Procedures

PKI-179 (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the PKI-179 (hydrochloride) in the solvent of choice. PKI-179 (hydrochloride) is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of PKI-179 (hydrochloride) in these solvents is approximately 2.5 and 2 mg/ml, respectively. PKI-179 (hydrochloride) is also slightly soluble in ethanol.

PKI-179 (hydrochloride) is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PKI-179 (hydrochloride) should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. PKI-179 (hydrochloride) has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PKI-179 is an orally bioavailable dual inhibitor of PI3K and mammalian target of rapamycin (mTOR).¹ In an *in vitro* enzymatic assay, it potently inhibits PI3K ($IC_{50}s = 8, 24, 17,$ and 74 nM for isoforms $\alpha, \beta, \delta,$ and γ , respectively), two common PI3K α mutants, E545K and H1047R ($IC_{50}s = 14$ and 11 nM, respectively), and mTOR ($IC_{50} = 0.42$ nM). PKI-179 is selective for PI3K and mTOR over a panel of 361 other kinases at IC_{50} values up to $50 \mu M$, hERG ($IC_{50} > 30 \mu M$), and cytochrome P450 (CYP) isoforms ($IC_{50}s > 30 \mu M$), but does have activity for CYP2C8 ($IC_{50} = 3 \mu M$). It inhibits proliferation through the Akt/mTOR signaling pathway in MDA-361 breast and PC3MM2 prostate cancer cell lines *in vitro* ($IC_{50}s = 22$ and 29 nM, respectively) and inhibits tumor growth in an MDA-361 mouse xenograft model when used at a dose of 50 mg/kg.

Reference

1. Venkatesan, A.M., Chen, Z., dos Santos, O., *et al.* PKI-179: An orally efficacious dual phosphatidylinositol-3-kinase (PI3K)/mammalian target of rapamycin (mTOR) inhibitor. *Bioorg. Med. Chem. Lett.* **20**(19), 5869-5873 (2010).

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, 11/16/2017

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