PRODUCT INFORMATION



CAY10622

Item No. 13687

CAS Registry No.:	1038549-25-5
Formal Name:	3-[[[[4-(aminocarbonyl)phenyl]amino]
	carbonyl]amino]methyl]-N-(1,2,3,4-
	tetrahydro-7-isoquinolinyl)-benzamide
MF:	$C_{25}H_{25}N_5O_3$
FW:	443.5 H ₂ N
Purity:	≥98%
UV/Vis.:	λ_{max} : 272 nm
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.	

Laboratory Procedures

CAY10622 is supplied as a crystalline solid. A stock solution may be made by dissolving CAY10622 in the solvent of choice, which should be purged with an inert gas. CAY10622 is soluble in the organic solvent DMSO at a concentration of approximately 0.15 mg/ml.

Description

Two Rho-associated kinases (ROCK), ROCK1 and ROCK2, act downstream of the G protein Rho to regulate cytoskeletal stability. The ROCKs play important roles in diverse cellular functions including cell adhesion and proliferation, smooth muscle contraction, and stem cell renewal.¹⁻³ CAY10622 is a potent, ureidobenzamide inhibitor of ROCK1 and ROCK2 with IC₅₀ values of 6 and 4 nM, respectively. It is inactive (showing greater then 100-fold selectivity) against an additional 44 kinases.⁴

References

- 1. Olson, M.F. Applications for ROCK kinase inhibition. Curr. Opin. Cell Biol. 20(2), 242-248 (2008).
- 2. Narumiya, S., Tanji, M., and Ishizaki, T. Rho signaling, ROCK and mDia1, in transformation, metastasis and invasion. Cancer Metastasis Rev. 28(1-2), 65-76 (2009).
- 3. Watanabe, K., Ueno, M., Kamiya, D., et al. A ROCK inhibitor permits survival of dissociated human embryonic stem cells. Nat. Biotechnol. 25(6), 681-686 (2007) ..
- Morwick, T., Büttner, F.H., Cywin, C.L., et al. Hit to lead account of the discovery of bisbenzamide and 4 related ureidobenzamide inhibitors of Rho kinase. J. Med. Chem. 53(2), 759-777 (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.

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, 03/28/2024

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