

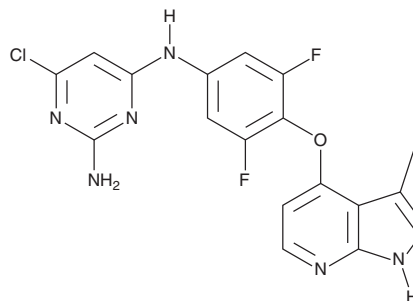
PRODUCT INFORMATION



TC-S 7001

Item No. 19129

CAS Registry No.: 867017-68-3
Formal Name: 6-chloro-N⁴-[3,5-difluoro-4-[(3-methyl-1H-pyrrolo[2,3-b]pyridin-4-yl)oxy]phenyl]-2,4-pyrimidinediamine
Synonym: Azaindole 1
MF: C₁₈H₁₃ClF₂N₆O
FW: 402.8
Purity: ≥95%
UV/Vis.: λ_{max}: 225, 266, 305, 311 nm
Supplied as: A 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

TC-S 7001 is supplied as a solid. A stock solution may be made by dissolving the TC-S 7001 in the solvent of choice, which should be purged with an inert gas. TC-S 7001 is soluble in organic solvents such as ethanol and DMSO.

Description

TC-S 7001 is an inhibitor of Rho-associated kinase (ROCK; IC₅₀s = 0.6 and 1.1 nM, respectively, for human ROCK1 and ROCK2).¹ It is selective for ROCK over myosin light-chain kinase (MLCK) and zipper-interacting protein kinase (ZIP-kinase; IC₅₀s = 7,400 and 4,100 nM, respectively), as well as 110 kinases in a panel at 1-10 μM, but does inhibit TRK and FLT3 (IC₅₀s = 252 and 303 nM, respectively). TC-S 7001 reduces ROCK2-induced phosphorylation of human myosin-binding subunit (MBS) when used at a concentration of 3 nM and decreases ROCK2 autophosphorylation. It inhibits contraction of isolated rabbit saphenous artery induced by phenylephrine (IC₅₀ = 65 nM) and decreases blood pressure in normotensive and hypertensive rats when administered at doses of 3 and 10 mg/kg. TC-S 7001 also decreases right ventricular systolic pressure and total pulmonary resistance in a rat model of monocrotaline-induced pulmonary hypertension when administered at a dose of 10 mg/kg per day.²

References

1. Kast, R., Schirok, H., Figueroa-Pérez, S., *et al.* Cardiovascular effects of a novel potent and highly selective azaindole-based inhibitor of Rho-kinase. *Br. J. Pharmacol.* **152(7)**, 1070-1080 (2007).
2. Dahal, B.K., Kosanovic, D., Pamarthi, P.K., *et al.* Therapeutic efficacy of azaindole-1 in experimental pulmonary hypertension. *Eur. Respir. J.* **36(4)**, 808-818 (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.

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