

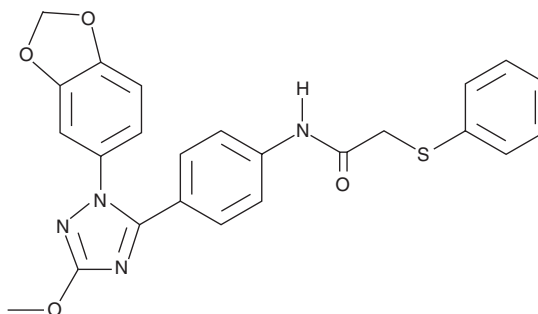
PRODUCT INFORMATION



SecinH3

Item No. 10009570

CAS Registry No.: 853625-60-2
Formal Name: N-[4-[5-(1,3-benzodioxol-5-yl)-3-methoxy-1H-1,2,4-triazol-1-yl]phenyl]-2-(phenylthio)-acetamide
MF: C₂₄H₂₀N₄O₄S
FW: 460.5
Purity: ≥98%
UV/Vis.: λ_{max}: 257 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

SecinH3 is supplied as a crystalline solid. A stock solution may be made by dissolving the SecinH3 in the solvent of choice, which should be purged with an inert gas. SecinH3 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of SecinH3 in these solvents is approximately 0.3, 25, and 30 mg/ml, respectively.

SecinH3 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, SecinH3 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. SecinH3 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

SecinH3 is a selective inhibitor of cytohesins, blocking human, mouse, and *Drosophila* cytohesins with IC₅₀ values of 2.4 to 5.6 μM.¹ It binds the Sec7 domain of these small Arf-GEFs but does not bind Sec7 domains of larger Arf-GEFs.² In human liver carcinoma HepG2 cells, SecinH3 prevents cytohesin-dependent insulin signaling.¹ In mice, SecinH3 produces hepatic insulin resistance.¹ Inhibition of the cytohesin GEF from *Drosophila*, Steppke, blocks insulin signaling and interferes with development.³ SecinH3 is useful for studying the diverse roles of cytohesins, including the regulation of receptor-mediated cancer cell proliferation.⁴

References

1. Hafner, M., Schmitz, A., Grüne, I., *et al.* Inhibition of cytohesins by SecinH3 leads to hepatic insulin resistance. *Nature* **444**(7121), 941-944 (2006).
2. Bi, X., Schmitz, A., Hayallah, A.M., *et al.* Affinity-based labeling of cytohesins with a bifunctional SecinH3 photoaffinity probe. *Angew. Chem. Int. Ed. Engl.* **47**(49), 9565-9568 (2008).
3. Fuss, B., Becker, T., Zinke, I., *et al.* The cytohesin Steppke is essential for insulin signalling in *Drosophila*. *Nature* **444**(7121), 945-948 (2006).
4. Pan, T., Sun, J., Hu, J., *et al.* Cytohesins/ARNO: The function in colorectal cancer cells. *PLoS One* **9**(3), e90997 (2014).

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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