

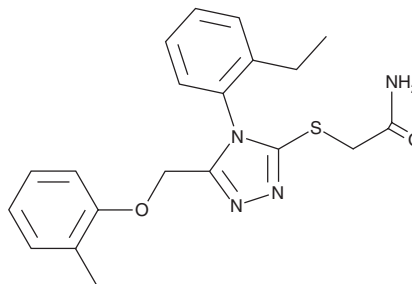
PRODUCT INFORMATION



A2ti-1

Item No. 43993

CAS Registry No.: 570390-00-0
Formal Name: 2-[[4-(2-ethylphenyl)-5-[(2-methylphenoxy)methyl]-4H1,2,4-triazol-3-yl]thio]-acetamide
MF: C₂₀H₂₂N₄O₂S
FW: 382.5
Purity: ≥98%
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

A2ti-1 is supplied as a solid. A stock solution may be made by dissolving the A2ti-1 in the solvent of choice, which should be purged with an inert gas. A2ti-1 is sparingly soluble (1-10 mg/ml) in ethanol and DMSO.

Description

A2ti-1 is an inhibitor of the protein-protein interaction between annexin A2 and S100A10 (IC₅₀ = 24 μM in a cell-free assay).¹ It prevents human papillomavirus 16 (HPV16) infection in HeLa cells when used at concentrations ranging from 25 to 100 μM.² A2ti-1 (2 and 10 μM) enhances cytotoxicity induced by doxorubicin (Item No. 15007) in Hs 578T triple-negative breast cancer (TNBC) cells.³ It disrupts circadian regulation of intracellular calcium oscillations in primary mouse suprachiasmatic nucleus astrocytes and neurons when used at a concentration of 80 μM.⁴

References

1. Reddy, T.R.K., Li, C., Fischer, P.M., *et al.* Three-dimensional pharmacophore design and biochemical screening identifies substituted 1,2,4-triazoles as inhibitors of the annexin A2-S100A10 protein interaction. *ChemMedChem* **7(8)**, 1435-1446 (2012).
2. Woodham, A.W., Taylor, J.R., Jimenez, A.I., *et al.* Small molecule inhibitors of the annexin A2 heterotetramer prevent human papillomavirus type 16 infection. *J. Antimicrob. Chemother.* **70(6)**, 1686-1690 (2015).
3. Koh, M., Lim, H., Jin, H., *et al.* ANXA2 (annexin A2) is crucial to ATG7-mediated autophagy, leading to tumor aggressiveness in triple-negative breast cancer cells. *Autophagy* **20(3)**, 659-674 (2024).
4. Patton, A.P., Krogager, T.P., Maywood, E.S., *et al.* Multi-omic analysis reveals astrocytic annexin-A2 as critical for network-level circadian timekeeping in the suprachiasmatic nucleus. *Glia* **73(7)**, 1483-1501 (2025).

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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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