

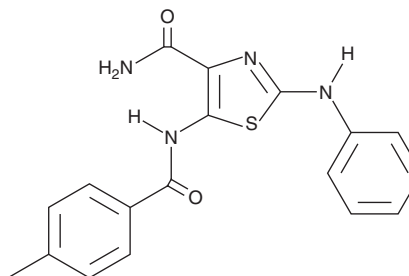
PRODUCT INFORMATION



KY 05009

Item No. 29552

CAS Registry No.: 1228280-29-2
Formal Name: 5-[(4-methylbenzoyl)amino]-2-(phenylamino)-4-thiazolecarboxamide
MF: C₁₈H₁₆N₄O₂S
FW: 352.4
Purity: ≥98%
UV/Vis.: λ_{max}: 244, 277, 356 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

KY 05009 is supplied as a crystalline solid. A stock solution may be made by dissolving the KY 05009 in the solvent of choice, which should be purged with an inert gas. KY 05009 is soluble in the organic solvent DMSO (sonicated).

Description

KY 05009 is an inhibitor of TRAF2- and NCK-interacting kinase (TNIK; K_i = 100 nM).¹ It inhibits TGF-β1-induced Wnt, NF-κB, ERK, and JNK signaling and prevents TGF-β1-induced epithelial-to-mesenchymal transition (EMT) in A549 lung cancer cells without inducing cytotoxicity when used at a concentration of 10 μM. KY 05009 inhibits TNF-β1-induced A549 cell migration. It also induces apoptosis in RPMI-8226 multiple myeloma cells in a concentration-dependent manner.²

References

1. Kim, J., Moon, S.H., Kim, B.T., *et al.* A novel aminothiazole KY-05009 with potential to inhibit Traf2- and Nck-interacting kinase (TNIK) attenuates TGF-β1-mediated epithelial-to-mesenchymal transition in human lung adenocarcinoma A549 cells. *PLoS One* **9(10)**, e110180 (2014).
2. Lee, Y., Jung, J.I., Park, K.Y., *et al.* Synergistic inhibition effect of TNIK inhibitor KY-05009 and receptor tyrosine kinase inhibitor dovitinib on IL-6-induced proliferation and Wnt signaling pathway in human multiple myeloma cells. *Oncotarget* **8(25)**, 41091-41101 (2017).

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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