

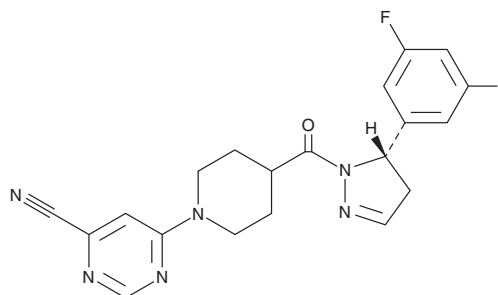
PRODUCT INFORMATION



GSK547

Item No. 37347

CAS Registry No.: 2226735-55-1
Formal Name: 6-[4-[[[(5S)-5-(3,5-difluorophenyl)-4,5-dihydro-1H-pyrazol-1-yl]carbonyl]-1-piperidiny]-4-pyrimidinecarbonitrile
Synonym: RIP1i
MF: C₂₀H₁₈F₂N₆O
FW: 396.4
Purity: ≥98%
UV/Vis.: λ_{max}: 256 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

GSK547 is supplied as a solid. A stock solution may be made by dissolving the GSK547 in the solvent of choice, which should be purged with an inert gas. GSK547 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of GSK547 in DMF is approximately 1 mg/ml. GSK547 is slightly soluble in ethanol and DMSO.

Description

GSK547 is an inhibitor of receptor-interacting serine/threonine kinase 1 (RIPK1; IC₅₀ = 31 nM).¹ It is selective for RIPK1 over a panel of 371 kinases, including RIPK2, -3, -4, and -5, at 10 μM. *In vivo*, GSK547 (100 mg/kg) increases survival and reduces tumor volume and the number of liver metastases in a P48^{Cre} Kras^{G12D} orthotopic mouse model of progressive pancreatic ductal adenocarcinoma (PDA). Adoptive transfer of tumor-infiltrating T cells isolated from GSK547-treated mice protects against orthotopic PDA tumor growth in mice. GSK547 also reduces plasma levels of TNF-α and IL-1β and decreases macrophage infiltration in aortic sinus lesions in an ApoE^{SA/SA} mouse model of early-phase atherogenesis.²

References

1. Wang, W., Marinis, J.M., Beal, A.M., *et al.* RIP1 kinase drives macrophage-mediated adaptive immune tolerance in pancreatic cancer. *Cancer Cell* **34**(5), 757-774 (2018).
2. Zhang, Y., Li, H., Huang, Y., *et al.* Stage-dependent impact of RIPK1 inhibition on atherogenesis: Dual effects on inflammation and foam cell dynamics. *Front. Cardiovasc. Med.* **8**:715337, (2021).

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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