

PRODUCT INFORMATION

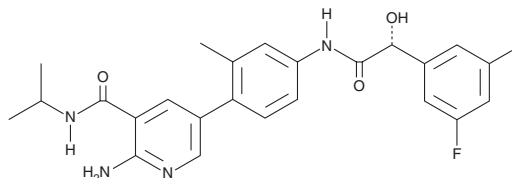


HC-5404

Item No. 45588

CAS Registry No.: 2247396-91-2
Formal Name: 2-amino-5-[4-[[[(2R)-2-(3,5-difluorophenyl)-2-hydroxyacetyl]amino]-2-methylphenyl]-N-(1-methylethyl)-3-pyridinecarboxamide

Synonym: LY-4
MF: C₂₄H₂₄F₂N₄O₃
FW: 454.5
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

HC-5404 is supplied as a solid. A stock solution may be made by dissolving the HC-5404 in the solvent of choice, which should be purged with an inert gas. HC-5404 is sparingly soluble (1-10 mg/ml) in a 1:1 solution of acetonitrile:water.

Description

HC-5404 is an inhibitor of protein kinase R-like ER kinase (PERK; IC₅₀ = 4 nM in a cell-free assay).¹ It is selective for PERK over a panel of 25 kinases at 1 mM. HC-5404 reduces the levels of phosphorylated eukaryotic translation initiation factor 2α subunit (eIF2α) in HEK293 cells (IC₅₀ = 33 nM). It reduces tumor volume in a 786-O renal cell carcinoma mouse xenograft model when administered at a dose of 30 mg/kg once or twice per day.² HC-5404 has an additive effect on tumor growth inhibition when administered in combination with axitinib (Item No. 13813), cabozantinib (XL184; Item No. 18464), lenvatinib (Item No. 19375), or sunitinib (Item No. 13159) in a 786-O mouse xenograft model.

References

1. Calvo, V., Surguladze, D., Li, A.H., *et al.* Discovery of 2-amino-3-amido-5-aryl-pyridines as highly potent, orally bioavailable, and efficacious PERK kinase inhibitors. *Bioorg. Med. Chem. Lett.* **43**, 128058 (2021).
2. Stokes, M.E., Calvo, V., Fujisawa, S., *et al.* PERK inhibition by HC-5404 sensitizes renal cell carcinoma tumor models to antiangiogenic tyrosine kinase inhibitors. *Clin. Cancer Res.* **29(23)**, 4870-4882 (2023).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 05/04/2026

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