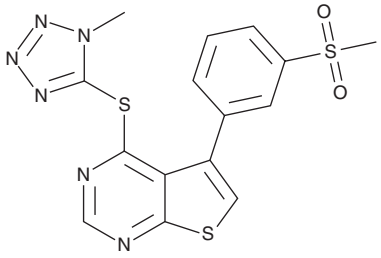
PRODUCT INFORMATION

NCT-504

Item No. 46708

CAS Registry No.:	1222765-97-0
Formal Name:	5-[3-(methylsulfonyl)phenyl]-4-[(1-methyl-1H-tetrazol-5-yl)thio]-thieno[2,3-d]pyrimidine
MF:	$C_{15}H_{12}N_6O_2S_3$
FW:	404.5
Purity:	≥95%
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

NCT-504 is supplied as a solid. A stock solution may be made by dissolving the NCT-504 in the solvent of choice, which should be purged with an inert gas. NCT-504 is sparingly soluble (1-10 mg/ml) in DMSO.

Description

NCT-504 is an allosteric inhibitor of phosphatidylinositol 5-phosphate 4-kinase type-2 γ (PIP4K2γ; IC_{50} = 15.8 µM).[1] It is selective for PIP4K2γ over a panel of 441 other kinases at 10 µM. NCT-504 increases PI5P, $PI(3,5)P_2$, and PI3P levels in primary mouse embryonic fibroblasts (MEFs) and autophagic flux in primary MEFs and rat cortical neurons. NCT-504 reduces mutant huntingtin (mHTTQ74) levels and aggregates in primary mouse cortical neurons and mHTT levels in Huntington's disease patient-derived fibroblasts. NCT-504 decreases tau-GFP levels in Daoy cells expressing tau-GFP.[2]

References

1. Lee, J.Y., Zhu, C., Boldridge, M.A., *et al*. A multi-functional oral small molecule targeting energy and lipid metabolism to treat obesity and related metabolic disorders. *Sci. Adv*. **12(34)**, eaed3119 (2026).
2. Baro, M., Lee, H., Kelley, V., *et al*. Redundancy of the OST catalytic subunit facilitates therapeutic targeting of N-glycosylation. *Cell Chem. Biol*. **32(6)**, 839-853.e6 (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.

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.

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