PRODUCT INFORMATION



RP 6306

Item No. 41732

CAS Registry No.: 2719793-90-3

Formal Name: (1S)-2-amino-1-(3-hydroxy-2,6-

> dimethylphenyl)-5,6-dimethyl-1H-pyrrolo[2,3-b]pyridine-3-

carboxamide

Synonyms: Lunresertib, (S)-RP 6306

MF: $C_{18}H_{20}N_4O_2$ FW: 324.4 **Purity:** ≥95% Supplied as: A solid -20°C Storage: Stability: ≥4 years

 NH_2

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

RP 6306 is supplied as a solid. A stock solution may be made by dissolving the RP 6306 in the solvent of choice, which should be purged with an inert gas. RP 6306 is sparingly soluble (1-10 mg/ml) in DMSO.

Description

RP 6306 is an inhibitor of membrane-associated tyrosine- and threonine-specific Cdc2-inhibitory kinase (Myt1 kinase), also known as PKMYT1 (IC₅₀ = 0.002 nM in a bioluminescence resonance energy transfer (BRET) assay). It is greater than 29-fold selective for Myt1 kinase over eight other kinases in BRET assays at 1.2 μM. RP 6306 (500 nM) increases the levels of DNA-associated γ histone H2AX (γH2AX), a marker of DNA damage, in hTERT FT 282 fallopian tube cells.² It induces cell cycle arrest at the S phase in hTERT FT 282 cells. Dietary administration of RP 6306 (15, 50, or 300 ppm) reduces tumor volume in an OVCAR-3 ovarian cancer mouse xenograft model.¹

References

- 1. Szychowski, J., Papp, R., Dietrich, E., et al. Discovery of an orally bioavailable and selective PKMYT1 inhibitor, RP-6306. J. Med. Chem. 65(15), 10251-10284 (2022).
- Gallo, D., Young, J.T.F., Fourtounis, J., et al. CCNE1 amplification is synthetic lethal with PKMYT1 kinase inhibition. Nature 604(7907), 749-756 (2022).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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