

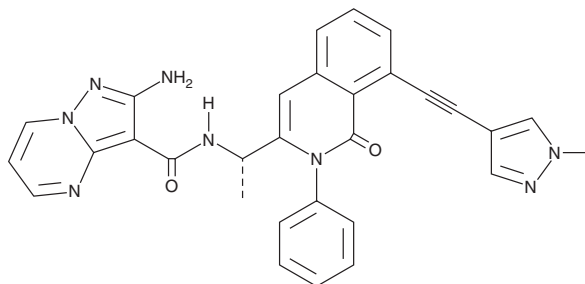
PRODUCT INFORMATION



IPI-549

Item No. 26416

CAS Registry No.: 1693758-51-8
Formal Name: 2-amino-N-[(1S)-1-[1,2-dihydro-8-[2-(1-methyl-1H-pyrazol-4-yl)ethynyl]-1-oxo-2-phenyl-3-isoquinoliny]ethyl]-pyrazolo[1,5-a]pyrimidine-3-carboxamide
MF: C₃₀H₂₄N₈O₂
FW: 528.6
Purity: ≥98%
UV/Vis.: λ_{max}: 268, 360 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

IPI-549 is supplied as a crystalline solid. A stock solution may be made by dissolving the IPI-549 in the solvent of choice. IPI-549 is soluble in organic solvents such as ethanol and DMSO, which should be purged with an inert gas. The solubility of IPI-549 in these solvents is approximately 8 and 100 mg/ml, respectively.

Description

IPI-549 is an inhibitor of PI3Kγ (IC₅₀s = 16, 3,200, 3,500, and >8,400 nM for PI3Kγ, PI3Kα, PI3Kβ, and PI3Kδ, respectively).¹ It is greater than 100-fold selective for PI3Kγ over a panel of 468 mutant and nonmutant protein and lipid kinases, including Class II PI3K isoforms, and a panel of 80 G protein-coupled receptors, ion channels, and transporters at 10 μM. It inhibits phosphorylation of AKT S473 in SKOV3, 786-O, RAW 264.7, and RAJI cells and inhibits migration of bone marrow-derived macrophages (BMDMs) (IC₅₀ = 85 nM). IPI-549 sensitizes doxorubicin-resistant SW620/Ad300 cells to P-glycoprotein (P-gp) substrates, such as paclitaxel (IC₅₀s = 710 and 6.7 nM for paclitaxel alone and in combination with IPI-549, respectively), and increases the level of intracellular paclitaxel in SW620/Ad300 cells.² It also enhances the tumor growth reduction of paclitaxel (Item No. 10461) in an SW620/Ad300 mouse xenograft model when administered at a dose of 3 mg/kg in combination with paclitaxel.

References

1. Evans, C.A., Liu, T., Lescarbeau, A., *et al.* Discovery of a selective phosphoinositide-3-kinase (PI3K)-γ inhibitor (IPI-549) as an immuno-oncology clinical candidate. *ACS Med. Chem. Lett.* **7**(9), 862-867 (2016).
2. De Vera, A.A., Gupta, P., Lei, Z., *et al.* Immuno-oncology agent IPI-549 is a modulator of P-glycoprotein (P-gp, MDR1, ABCB1)-mediated multidrug resistance (MDR) in cancer: *In vitro* and *in vivo*. *Cancer Lett.* **442**, 91-103 (2019).

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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