



Certificate of Analysis

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Product Name: Idelalisib Catalog No.: 7631 Batch No.: 1

CAS Number: 870281-82-6

IUPAC Name: 5-Fluoro-3-phenyl-2-[(1S)-1-(9H-purin-6-ylamino)propyl]-4(3H)-quinazolinone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{22}H_{18}FN_7O$.Batch Molecular Weight:415.42Physical Appearance:White solid

Solubility: DMSO to 100 mM

ethanol to 10 mM

Storage: Store at -20°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.8% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Optical Rotation: $[\alpha]_D = +248.3$ (Concentration = 0.5, Solvent = DMSO)

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 63.61 4.37 23.6 Found 63.19 4.37 23.45

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use



Product Information

Print Date: Feb 7th 2022

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Description:

Idelalisib is a potent PI 3-Kinase δ inhibitor (IC $_{50}$ = 2.5 nM for p110 δ); it exhibits >40-fold selectivity for the δ isoform over other PI 3-K class I enzymes (IC $_{50}$ s = 89, 565, and 820 nM for p110 γ , p110 β , and p110 α respectively). Idelalisib blocks constitutive PI 3-K signaling in malignant B-cell lines and primary patient tumor cells. Idelalisib inhibits chronic lymphocytic leukemia cell chemotaxis and downregulates chemokine secretion triggered by B-cell receptor signaling in stromal cocultures. Idelalisib lacks significant cytotoxicity toward natural killer (NK) cells. Idelalisib also decreases production... Please see product specific page on www.tocris.com for full description.

Physical and Chemical Properties:

Batch Molecular Formula: C₂₂H₁₈FN₇O. Batch Molecular Weight: 415.42 Physical Appearance: White solid

Minimum Purity: ≥98%

Batch Molecular Structure:

F O N HN N

Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 100 mM ethanol to 10 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Poli et al (2021) PIP4Ks impact on PI3K, FOXP3, and UHRF1 signaling and modulate human regulatory T cell proliferation and immunosuppressive activity. Proc.Natl.Acad.Sci.U.S.A. **118** e2010053118. PMID: 34312224.

Hoellenriegel *et al* (2011) The phosphoinositide 3'-kinase delta inhibitor, CAL-101, inhibits B-cell receptor signaling and chemokine networks in chronic lymphocytic leukemia. Blood *118* 3603. PMID: 21803855.

Lannutti et al (2011) CAL-101, a p110delta selective phosphatidylinositol-3-kinase inhibitor for the treatment of B-cell malignancies, inhibits PI3K signaling and cellular viability. Blood 117 591. PMID: 20959606.

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