Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Idelalisib

Catalog No: tcsc0256

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg

Size: 1g

Size: 2g

Size: 5g

Specifications

CAS No:
870281-82-6

Formula:
$C_{22}H_{18}FN_7O$

Pathway:
PI3K/Akt/mTOR;Autophagy

Target:
PI3K;Autophagy

Purity / Grade:
>98%

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Solubility:
DMSO : ≥ 59.7 mg/mL (143.71 mM)

Alternative Names:
CAL-101; GS-1101

Observed Molecular Weight:
415.42

Product Description

Idelalisib (CAL-101) is a highly selective and potent **p110δ** inhibitor with an **IC_{50}** of 2.5 nM, showing 40- to 300-fold selectivity for p110δ over other PI3K class I enzymes.

IC50 & Target: IC50: 2.5 nM (p110δ), 89 nM (p110γ), 565 nM (p110β), 820 nM (p110α)[1]

In Vitro: Idelalisib (CAL-101) is a highly selective and potent p110δ inhibitor (EC_{50}=8 nM). Greater selectivity (400- to 4000-fold) is seen against related kinases C2β, hVPS34, DNA-PK, and mTOR, whereas no activity is observed against a panel of 402 diverse kinases at 10 μM. CAL-101 reduces PDGF-induced pAkt by only 25% at 10 μM. Idelalisib (CAL-101) inhibits LPA-induced pAkt with an EC_{50} of 1.9 μM. Idelalisib (CAL-101) blocks FcεRI p110δ-mediated CD63 expression with an EC_{50} of 8 nM, whereas formyl-methionyl-leucyl-phenylalanine activation of p110γ is inhibited with an EC_{50} of 3 μM. Thus, in cell-based assays, CAL-101 has 240- to 2500-fold selectivity for p110δ over the other class I PI3K isoforms[1]. CAL-101Idelalisib (CAL-101)-induced apoptosis of chronic lymphocytic leukemia (CLL) cells is significant compare with vehicle treatment alone (P[2].

In Vivo: A significant reduction is observed in the $CD11b^{+}Ly6G^{+}$ neutrophils from brain homogenates of bothp110$\delta^{D910A/D910A}$ mice and Idelalisib (CAL-101) (40 mg/kg, i.v.) post-treated mice[3].