

# 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:

 $\mathrm{C_{22}H_{18}FN_{7}O}$ 

### Pathway: PI3K/Akt/mTOR;Autophagy

#### **Target:**

PI3K;Autophagy

#### Purity / Grade:

>98%

Copyright 2021 Taiclone Biotech Corp.



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<sub>50</sub>** 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)<sup>[1]</sup>

*In Vitro:* Idelalisib (CAL-101) is a highly selective and potent p1106 inhibitor ( $EC_{50}$ =8 nM). Greater selectivity (400- to 4000-fold) is seen against related kinases C2 $\beta$ , hVPS34, DNA-PK, and mTOR, whereas no activity is observed against a panel of 402 diverse kinases at 10  $\mu$ M. CAL-101 reduces PDGF-induced pAkt by only 25% at 10  $\mu$ M. Idelalisib (CAL-101) inhibits LPA-induced pAkt with an  $EC_{50}$  of 1.9  $\mu$ M. Idelalisib (CAL-101) blocks FceRI p1106-mediated CD63 expression with an  $EC_{50}$  of 8 nM, whereas formyl-methionyl-leucyl-phenylalanine activation of p110 $\gamma$  is inhibited with an  $EC_{50}$  of 3  $\mu$ M. Thus, in cell-based assays, CAL-101 has 240- to 2500-fold selectivity for p1106 over the other class I PI3K isoforms<sup>[1]</sup>. 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<sup>+</sup>Ly6G<sup>+</sup> neutrophils from brain homogenates of bothp110 $\delta^{D910A/D910A}$  mice and Idelalisib (CAL-101) (40 mg/kg, i.v.) post-treated mice<sup>[3]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!

Copyright 2021 Taiclone Biotech Corp.