

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%

Solubility:

DMSO : ≥ 59.7 mg/mL (143.71 mM)

Alternative Names:

CAL-101; GS-1101

Observed Molecular Weight:

415.42

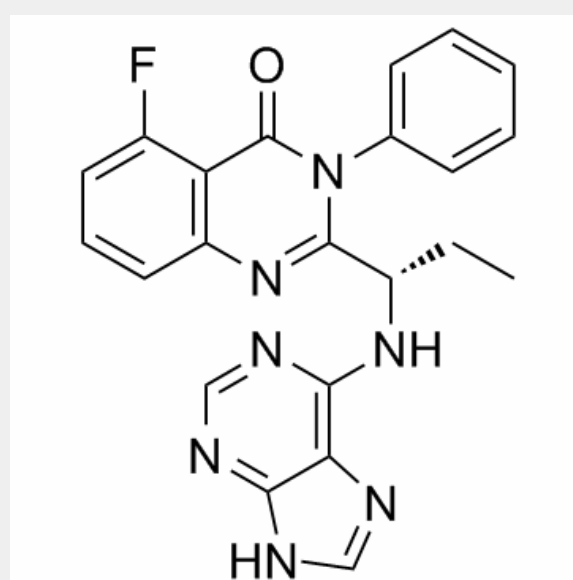
Product Description

Idelalisib (CAL-101) is a highly selective and potent **p110 δ** inhibitor with an **IC₅₀** of 2.5 nM, showing 40- to 300-fold selectivity for p110 δ over other PI3K class I enzymes.

IC50 & Target: IC50: 2.5 nM (p110 δ), 89 nM (p110 γ), 565 nM (p110 β), 820 nM (p110 α)^[1]

In Vitro: Idelalisib (CAL-101) is a highly selective and potent p110 δ inhibitor (EC₅₀=8 nM). Greater selectivity (400- to 4000-fold) is seen against related kinases C2 β , hVPS34, DNA-PK, and mTOR, whereas no activity is observed against a panel of 402 diverse kinases at 10 μ M. CAL-101 reduces PDGF-induced pAkt by only 25% at 10 μ M. Idelalisib (CAL-101) inhibits LPA-induced pAkt with an EC₅₀ of 1.9 μ M. Idelalisib (CAL-101) blocks Fc ϵ RI p110 δ -mediated CD63 expression with an EC₅₀ of 8 nM, whereas formyl-methionyl-leucyl-phenylalanine activation of p110 γ is inhibited with an EC₅₀ of 3 μ M. Thus, in cell-based assays, CAL-101 has 240- to 2500-fold selectivity for p110 δ over the other class I PI3K isoforms^[1]. 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 both p110 δ ^{D910A/D910A} mice and Idelalisib (CAL-101) (40 mg/kg, i.v.) post-treated mice^[3].



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