



CZC24832

Catalog No: tcsc0710



Available Sizes

Size: 5mg

Size: 10mg



Specifications

CAS No:

1159824-67-5

Formula:

 $\mathrm{C_{15}H_{17}FN_6O_2S}$

Pathway:

PI3K/Akt/mTOR

Target:

PI3K

Purity / Grade:

>98%

Solubility:

DMSO : ≥ 53 mg/mL (145.44 mM)

Observed Molecular Weight:

364.4

Product Description

CZC24832 is a highly selective and potent **PI3Ky** inhibitor (IC $_{50}$ =27 nM) with apparent dissociation constants ($\mathbf{K_d}^{\mathbf{app}}$) of 19 nM.

IC50 & Target: IC50: 27 nM (PI3K γ), 1.1 μ M (PI3K β), 8.194 μ M (PI3K δ) [1]

Kdapp: 19 nM (PI3Kγ)^[1]





In Vitro: CZC24832 is active in PI3Ky-dependent cellular C5a-induced AKT Ser473 phosphorylation (IC $_{50}$ =1.2 μ M) and N-formyl-methionine-leucinephenylalanine (fMLP)-induced neutrophil migration assays (IC $_{50}$ =1.0 μ M) $^{[1]}$.

In Vivo: CZC24832 shows suitable pharmacokinetic properties including low clearance (0.84 L per h per kg body weight) and high oral bioavailability (37%), thus allowing further characterization of the inhibitor in rodent models of inflammation. In an IL-8-dependent air pouch model, CZC24832 shows a dose-dependent reduction of granulocyte recruitment (80% inhibition at 10 mg per kg body weight) consistent with the degree of inhibition observed in PI3Kγ-null mice. Mice treated orally with 10 mg CZC24832 per kg body weight twice per day show a substantial decrease of bone and cartilage destruction (53% reduction by histopathological analysis) as well as of overall clinical parameters (38% reduction)^[1].

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