

# CZC24832

Catalog No: tcsc0710



## Available Sizes

Size: 5mg

Size: 10mg



## Specifications

### CAS No:

1159824-67-5

### Formula:

$C_{15}H_{17}FN_6O_2S$

### Pathway:

PI3K/Akt/mTOR

### Target:

PI3K

### Purity / Grade:

>98%

### Solubility:

DMSO :  $\geq 53$  mg/mL (145.44 mM)

### Observed Molecular Weight:

364.4

## Product Description

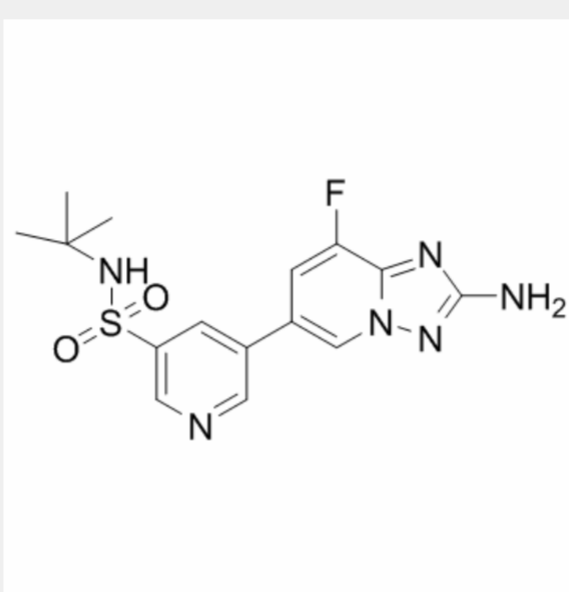
CZC24832 is a highly selective and potent **PI3K $\gamma$**  inhibitor ( $IC_{50}$ =27 nM) with apparent dissociation constants ( $K_d^{app}$ ) of 19 nM.

IC50 & Target: IC50: 27 nM (PI3K $\gamma$ ), 1.1  $\mu$ M (PI3K $\beta$ ), 8.194  $\mu$ M (PI3K $\delta$ )<sup>[1]</sup>

Kdapp: 19 nM (PI3K $\gamma$ )<sup>[1]</sup>

**In Vitro:** CZC24832 is active in PI3K $\gamma$ -dependent cellular C5a-induced AKT Ser473 phosphorylation ( $IC_{50}$ =1.2  $\mu$ M) and N-formyl-methionine-leucinephenylalanine (fMLP)-induced neutrophil migration assays ( $IC_{50}$ =1.0  $\mu$ M)<sup>[1]</sup>.

**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 PI3K $\gamma$ -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)<sup>[1]</sup>.



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