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

# IC-87114

## Catalog No: tcsc0184

### Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg

### Specifications

**CAS No:**
371242-69-2

**Formula:**
$C_{22}H_{19}N_7O$

**Pathway:**
PI3K/Akt/mTOR

**Target:**
PI3K

**Purity / Grade:**
>98%

**Solubility:**
DMSO : 10 mg/mL (25.16 mM; Need ultrasonic)

**Observed Molecular Weight:**
397.43

## Product Description

IC-87114 is a potent and selective **PI3Kδ** inhibitor with **$IC_{50}$** of 0.5 μM.

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

IC50 & Target: IC50: 0.5 μM (PI3Kδ)[1]

***In Vitro:*** IC-87114 (IC87114), an analog of the original inhibitor, is synthesized and tested for PI3Kδ selectivity relative to the other class I PI3Ks. The $IC_{50}$ of IC87114 for PI3Kδ inhibition is 0.5 μM whereas the $IC_{50}$ values for PI3Kα, PI3Kβ, and PI3Kγ are >100, 75, and 29 μM, respectively. Thus IC87114 is 58-fold more selective for PI3Kδ relative to PI3Kγ, and over 100-fold selective relative to PI3Kα and PI3Kβ. IC87114 selectively antagonizes PI3Kδ over at least a concentration range of 0.3-10 μM[1]. IC-87114 (10 μM) is also used to selectively inhibit PI3Kδ catalytic activity to address this question. IC87114 (10 μM) effectively inactivates Akt in macrophages after treatment for 1 hour (n=6; P[2].

***In Vivo:*** Treatment with PD 89059 (10 mg/kg), IC-87114 (0.3 mg/kg) and BAY 11-7085 (10 mg/kg), significantly (P0.05). Of note, the observed reduction in the histopathological airway remodeling induced by PD 89059, IC-87114 and BAY 11-7085 are less effective as compared to the reduction seen with AG 1478 and SU6656[3].