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

# GSK2334470

## Catalog No: tcsc0917

### Available Sizes

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg

### Specifications

**CAS No:**
1227911-45-6

**Formula:**
$C_{25}H_{34}N_8O$

**Pathway:**
PI3K/Akt/mTOR

**Target:**
PDK-1

**Purity / Grade:**
>98%

**Solubility:**
DMSO : ≥ 50 mg/mL (108.09 mM)

**Observed Molecular Weight:**
462.59

## Product Description

GSK2334470 is a highly specific and potent inhibitor of **PDK1** with an **$IC_{50}$** of 10 nM.

IC50 & Target: IC50: 10 nM(PDK1)[1]

***In Vitro:***

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

Small molecule GSK2334470 inhibits PDK1 with an $IC_{50}$ of ~10 nM, but does not suppress the activity of 93 other protein kinases including 13 AGC-kinases most related to PDK1 at 500-fold higher concentrations. Addition of GSK2334470 ablates T-loop residue phosphorylation and activation of SGK isoforms and S6K1 induced by serum or IGF-1 (insulin-like growth factor 1). GSK2334470 and AZD8055 effectively inhibite phosphorylation of PDK1 and mTOR, respectively, and induce higher G0–G1 ratio in LAN-1-MK than that in LAN-1 as well. PDK1 and mTOR inhibitors effecte on phosphorylation of GSK3$\beta$ in some of resistant sublines[2].

***In Vivo:*** The efficacy of the PDK1 inhibitor (PDKi) GSK2334470 is tested in newborn $Braf^{V600E}::Pten^{-/-}$mice subjected to systemic administration of 4-HT. Twice weekly administration of PDK1 results in marked inhibition of pigmented lesions and concomitant melanomagenesis, as well as significant inhibition of lung metastases, seen by H&E staining-based quantification (~80%), and lymph node metastases as by S100 immunostaining, similar to the phenotype seen upon genetic ablation of *Pdk1*[3].