

PF-06651600

Catalog No: tcsc0020243



Available Sizes

Size: 5mg

Size: 10mg

Size: 25mg

Size: 50mg



Specifications

CAS No:

1792180-81-4

Formula:

$C_{15}H_{19}N_5O$

Pathway:

Epigenetics;Stem Cell/Wnt;JAK/STAT Signaling

Target:

JAK;JAK;JAK

Purity / Grade:

>98%

Solubility:

DMSO : 150 mg/mL (525.69 mM; Need ultrasonic and warming)

Observed Molecular Weight:

285.34

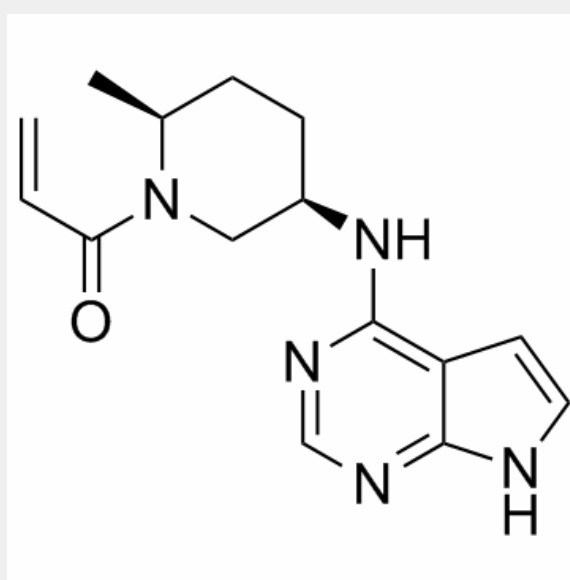
Product Description

PF-06651600 is a potent **JAK3**-selective inhibitor with an **IC₅₀** of 33.1 nM.

IC50 & Target: IC50: 33.1 nM (JAK3)^[1]

In Vitro: PF-06651600 is a potent JAK3-selective inhibitor which can inhibit the JAK3 kinase activity with an IC₅₀ of 33.1 nM but without activity (IC₅₀>10 000 nM) against JAK1, JAK2, and TYK2. PF-06651600 inhibits the phosphorylation of STAT5 elicited by IL-2, IL-4, IL-7, and IL-15 with IC₅₀ values of 244, 340, 407, and 266 nM, respectively. PF-06651600 also inhibits the phosphorylation of STAT3 elicited by IL-21 with an IC₅₀ of 355 nM. Functional assessment in T-cell differentiation assays demonstrate that PF-06651600 suppresses Th1 and Th17 differentiation as measured by IFN γ , after 5 days under Th1 conditions, and IL-17 production, after 6 days under Th17 conditions, with IC₅₀ values of 30 nM and 167 nM, respectively. PF-06651600 also suppresses Th1 and Th17 function as measured by the inhibition of IFN γ production (IC₅₀=48 nM) and IL-17 production (IC₅₀=269 nM) in cells that have been previously differentiated and rested before being treated with PF-06651600^[1].

In Vivo: In the rat adjuvant-induced arthritis (AIA) model, PF-06651600 reduces paw swelling with an unbound EC₅₀ of 169 nM. Similarly, PF-06651600 significantly reduces disease severity in the experimental autoimmune encephalomyelitis (EAE) mouse model when dosed either therapeutically at 30 or 100 mg/kg or prophylactically at 20 and 60 mg/kg. The efficacy of PF-06651600 in these two rodent models of inflammatory and autoimmune diseases illustrates that JAK3-selective inhibition can be sufficient to have disease modifying effects in human diseases^[1].



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