Taiclone®
Quality Guarantee

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

PP2

Catalog No: tcsc1663

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
172889-27-9

Formula:
$C_{15}H_{16}ClN_5$

Pathway:
Protein Tyrosine Kinase/RTK

Target:
Src

Purity / Grade:
>98%

Solubility:
H2O :

Alternative Names:
AGL 1879

Observed Molecular Weight:
301.77

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Product Description

PP2 is a potent, reversible, ATP-competitive, and selective inhibitor of the **Src** family of protein tyrosine kinases with **IC_{50}**s of 4 and 5 nM for **Lck** and **Fyn**, respectively.

IC50 & Target: IC50: 4 nM (Lck), 5 nM (Fyn)[1]

In Vitro: At 10 μM, the effect of PP2 on cellular proliferation is not significant, indicating that, at this low concentration, the effect of PP2 on Gemcitabine cytotoxicity does not simply reflect a direct antiproliferative effect, but rather a potentiation of Gemcitabine-induced cytotoxicity. Above 20 μM, growth is increasingly suppressed, a finding consistent with reports in other human cancer cell lines. Although 10 μM PP2 is used in our study, at higher concentrations PP2 is reported to inhibit other intracellular kinases[2]. PP2 is the most widely used commercially available Src family kinase inhibitor. PP2 inhibits Src family kinase activity with IC_{50} of ~5 nM in vitro, concentrations to 10 μM are often necessary to achieve complete Src family kinase inhibition in cell culture[3].

In Vivo: The tumor growth inhibition rate is 25% in the PP2 treatment group and 5% in the Gemcitabine treatment group (P>0.05). When administered in combination, PP2 and Gemcitabine produce a tumor growth inhibition rate of 98% (P[2].