

Store at
-20°C

PP2

#73901

5 mg

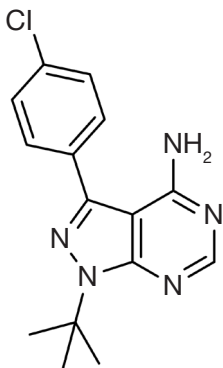
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New 04/20

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Background: PP2 is a potent and selective inhibitor of Src-family kinases. This small molecule inhibits Lck ($IC_{50} = 4$ nM), Fyn ($IC_{50} = 5$ nM), and Hck ($IC_{50} = 5$ nM) with little to no effect on ZAP-70 ($IC_{50} > 100$ μ M) and JAK2 ($IC_{50} > 50$ μ M) (1). Members of the Src family are involved in the regulation of cellular excitability and synaptic plasticity. Inhibition of Src family nonreceptor protein tyrosine kinases (PTKs) can decrease epileptiform activity, making PP2 an important compound when studying epilepsy and antiepileptic therapies (2).

Molecular Formula: $C_{15}H_{16}ClN_3$

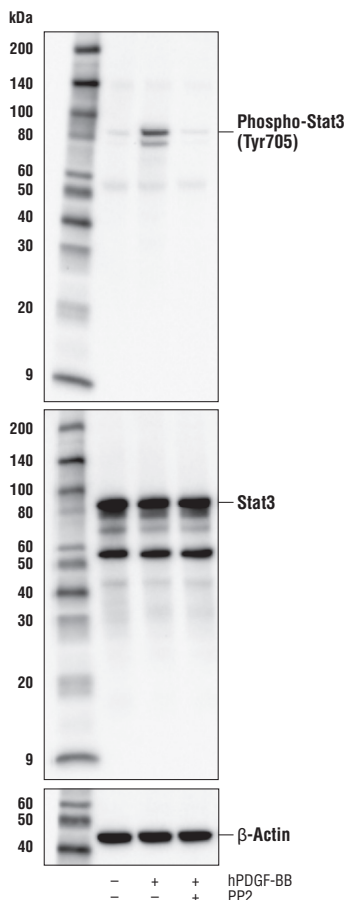


Molecular Weight: 301.8 g/mol

Purity: >98%

CAS: 172889-27-9

Solubility: Soluble in DMSO at 25 mg/ml or ethanol at 3 mg/ml with slight warming.



Western blot analysis of extracts from NIH/3T3 cells, untreated (-) or treated with Human Platelet-Derived Growth Factor BB (hPDGF-BB) #8912 (100 ng/ml, 15 min; +) with or without pretreating the cells with PP2 (10 μ M, 1 hr; +), using Phospho-Stat3 (Tyr705) (D3A7 XP® Rabbit mAb #9145) (upper), Stat3 (D1B2J) Rabbit mAb #30835 (middle), and β -Actin (D6A8) Rabbit mAb #8457 (lower).

Storage: Store lyophilized at -20°C, desiccated. In lyophilized form, the chemical is stable for 24 months. Once in solution, store at -20°C and use within 1 month to prevent loss of potency. Aliquot to avoid multiple freeze/thaw cycles.

Directions for Use: PP2 is supplied as a lyophilized powder. For a 15 mM stock, reconstitute 5 mg of powder in 1.1 ml of DMSO. Working concentrations and length of treatment can vary depending on the desired effect.

Background References:

- (1) Hanke, J.H. et al. (1996) *J Biol Chem* 271, 695-701.
- (2) Sanna, P.P. et al. (2000) *Proc Natl Acad Sci U S A* 97, 8653-7.

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Applications: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide **Species Cross-Reactivity:** H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—Horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.