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

1-Naphthyl PP1

Catalog No: tcsc1804

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Specifications

CAS No:
221243-82-9

Formula:
$C_{19}H_{19}N_5$

Pathway:
Protein Tyrosine Kinase/RTK

Target:
Src

Purity / Grade:
>98%

Solubility:
DMSO : 14.25 mg/mL (44.90 mM; Need ultrasonic and warming)

Alternative Names:
1-NA-PP 1

Observed Molecular Weight:
317.39

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Product Description

1-Naphthyl PP1(1-NA-PP 1) is a selective inhibitor of src family kinases v-Src and c-Fyn as well as the tyrosine kinase c-Abl (IC50 values are 1.0, 0.6, 0.6, 18 and 22 μM for v-Src, c-Fyn, c-Abl, CDK2 and CAMK II respectively).

IC50 Value:1.0 uM (v-Src); 0.6 uM (c-Fyn); 18 uM (c-Abl) [1]

Target: Src Family kinase

1-NA-PP1 was considerably more potent and showed distinct substituent effects at the pyrazolopyrimidine core. 1-NA-PP1 was cell-active, and potently blocked prostate cancer cell proliferation by inducing G2/M arrest. Overexpression of PKD1 or PKD3 almost completely reversed the growth arrest and the inhibition of tumor cell invasion caused by 1-NA-PP1, indicating that its anti-proliferative and anti-invasive activities were mediated through the inhibition of PKD. Interestingly, a 12-fold increase in sensitivity to 1-NA-PP1 could be achieved by engineering a gatekeeper mutation in the active site of PKD1, suggesting that 1-NA-PP1 could be paired with the analog-sensitive PKD1(M659G) for dissecting PKD-specific functions and signaling pathways in various biological systems [2].