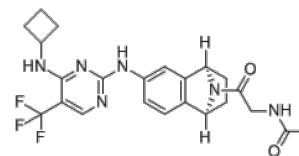


Product Name : PF-03814735
Cat. No. : PC-49273
CAS No. : 942487-16-3
Molecular Formula : C₂₃H₂₅F₃N₆O₂
Molecular Weight : 474.488
Target : Aurora Kinase
Solubility : 10 mM in DMSO



Biological Activity

PF-03814735 is a potent, orally bioavailable, reversible inhibitor of both Aurora A and Aurora B kinases with IC₅₀ values of 0.8 and 5 nM, respectively.

PF-03814735 produced significant inhibition of several other protein kinases in recombinant kinase enzymatic assays (FAK, 22 nM; TrkA 30 nM).

PF-03814735 showed >90% inhibition at 100 nM against 19/220 kinases.

PF-03814735 markedly reduced levels of Aurora1 phosphorylated on Thr 232 in cells with IC₅₀ of 20 nM, also inhibited the phosphorylation of histone H3 on Ser10, another marker of Aurora1 kinase activity, with an IC₅₀ of 50 nM.

PF-03814735 inhibited Aurora2 autophosphorylated on Thr288 with IC₅₀ of 150 nM in MDA-MB-231 tumor cell.

PF-03814735 exhibited antiproliferative effects against human cell lines from various tumor types (HCT-116, HL-60, A549, and H125) with IC₅₀ of 42-150 nM.

Oral administration of PF-03814735 to tumor-bearing mice results in inhibition of phosphohistone H3 in vivo, PF-03814735 (20 mg/kg, i.v.) inhibited tumor growth in human xenograft mouse models HCT-116 xenografts.

The combination of PF-03814735 and docetaxel in xenograft mouse tumor models shows additive tumor growth inhibition.

References

Jani JP, et al. Mol Cancer Ther. 2010 Apr;9(4):883-94.

Schöffski P, et al. Eur J Cancer. 2011 Oct;47(15):2256-64.

Hook KE, et al. Mol Cancer Ther. 2012 Mar;11(3):710-9.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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