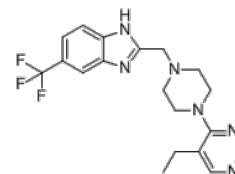


Product Name : PF-4708671
Cat. No. : PC-49024
CAS No. : 1255517-76-0
Molecular Formula : C₁₉H₂₁F₃N₆
Molecular Weight : 390.414
Target : Ribosomal S6 Kinase (RSK)
Solubility : 10 mM in DMSO



Biological Activity

PF-4708671 is a potent, specific, cell-permeable inhibitor of S6K1 (p70 ribosomal S6 kinase 1), inhibits the activity of full-length S6K1 in vitro with K_i of 20 nM, and S6K1 isolated from IGF1-stimulated HEK293 cells with IC_{50} of 160 nM.

PF-4708671 only inhibited very weakly the closely related S6K2 isoform (IC_{50} =56 μ M), as well as RSK1 (IC_{50} =4.7 μ M) and RSK2 (IC_{50} =9.2 μ M) over 20-fold less potently than S6K1.

PF-4708671 prevents the S6K1-mediated phosphorylation of S6 protein in response to IGF-1, while having no effect upon the PMA-induced phosphorylation of substrates of the highly related RSK (p90 ribosomal S6 kinase) and MSK (mitogen- and stress-activated kinase) kinases.

PF-4708671 enhances glucose deprivation-induced cell death via downregulation of anti-apoptotic proteins in MCF-7 breast cancer cells.

PF-4708671 inhibits cell migration in a model of metastasis of triple-negative breast cancer.

References

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

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