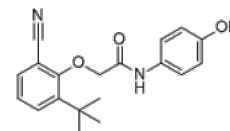


Product Name : NAMPT activator (NAT-5r)
Cat. No. : PC-38440
CAS No. : 2790481-63-7
Molecular Formula : C₁₉H₂₀N₂O₃
Molecular Weight : 324.380
Target : NAMPT
Solubility : 10 mM in DMSO



Biological Activity

NAMPT activator (NAT-5r) is a potent, small molecule activator of nicotinamide phosphoribosyltransferase (**NAMPT**) with ITC KD of 180 nM, 3-fold improved activity over NAT.

NAMPT activator (NAT-5r) had no effect on NMNAT1 enzyme activity, both NAMPT mutants of K189R and K189A reduced the binding affinity of NAT-5r.

NAMPT activator (NAT-5r) treatment significantly enhanced NAD content in NAMPT-WT cells, but not in NAMPT-CRISPR cells.

Treatment of NAT-5r at 3 μM concentrations for 4 h induced significant elevation of cellular NAD.

NAMPT activator (NAT-5r) induced subsequent metabolic and transcriptional reprogramming, promoted proliferation and maintain the self-renewal of NSCs and protects peripheral sensory neurons from paclitaxel-(PTX) induced damage in mouse model.

References

Hong Yao, et al. *Cell Research* (2022) 0:1-15.

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

E-mail: tech@probechem.com