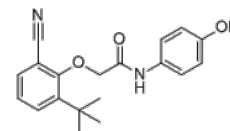


**Product Name** : NAMPT activator (NAT-5r)  
**Cat. No.** : PC-38440  
**CAS No.** : 2790481-63-7  
**Molecular Formula** : C<sub>19</sub>H<sub>20</sub>N<sub>2</sub>O<sub>3</sub>  
**Molecular Weight** : 324.380  
**Target** : NAMPT  
**Solubility** : 10 mM in DMSO



## 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