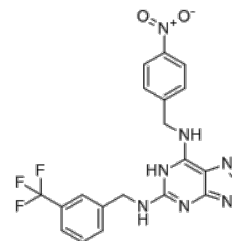


Product Name : IP6K1 inhibitor TNP
Cat. No. : PC-63313
CAS No. : 519178-28-0
Molecular Formula : C₂₀H₁₆F₃N₇O₂
Molecular Weight : 443.39
Target : Other Targets
Solubility : 10 mM in DMSO



Biological Activity

IP6K1 inhibitor TNP is a potent, selective inositol hexakisphosphate kinase **IP6K** with IC₅₀ of 0.47 μM (**IP6K1**), does not inhibit either human or yeast Vip/PIP5K.

IP6K1 inhibitor TNP reversibly inhibits InsP7 and InsP8 synthesis in vivo without affecting levels of other inositol phosphates.

IP6K1 inhibitor TNP increases the IGF-1 elicited stimulation of T308 phosphorylation of Akt without influencing p-S473, combination of TNP (10 μM) and SB216763 (1 μM) virtually abolishes adipogenic differentiation of NIH3T3-L1 cells.

IP6K1 inhibitor TNP ameliorates diet induced obesity and insulin resistance via inhibition of the IP6K1 pathway.

IP6K1 inhibitor TNP also suppresses neutrophil-mediated pulmonary damage in bacterial pneumonia.

References

Ghoshal S, et al. *Mol Metab.* 2016 Aug 21;5(10):903-17.

Zhu Q, et al. *J Clin Invest.* 2016 Nov 1;126(11):4273-4288.

Padmanabhan U, et al. *J Biol Chem.* 2009 Apr 17;284(16):10571-82.

Chakraborty A, et al. *Cell.* 2010 Dec 10;143(6):897-910.

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

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