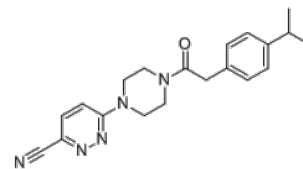


Product Name : PZ-2891
Cat. No. : PC-35831
CAS No. : 2170608-82-7
Molecular Formula : C₂₀H₂₃N₅O
Molecular Weight : 349.438
Target : Other Targets
Solubility : 10 mM in DMSO



Biological Activity

PZ-2891 (PZ2891) a specific, allosteric, BBB-permeable, orally active Pantothenate kinase (**PANK**) modulator, acting as both an orthosteric inhibitor (IC₅₀=1.3 nM, **hPANK3**) and an allosteric activator of PANK3 activity in the presence of acetyl-CoA in biochemical assays.

PZ-2891 occupies the pantothenate pocket and engages the dimer interface to form a PANK•ATP•Mg²⁺•PZ-2891 complex. PZ-2891 inhibits all 3 human and mouse pantothenate kinase isoforms (hPANK1α IC₅₀=40.2 nM, hPANK2 IC₅₀=0.7 nM).

PZ-2891 increases intracellular CoA in cultured cells and elevates CoA levels in mouse liver and brain, improves gain weight, locomotor activity and life span in mouse model of brain CoA deficiency.

References

Sharma LK, et al. *Nat Commun*. 2018 Oct 23;9(1):4399.

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

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