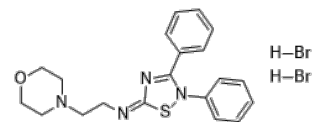


Product Name : VP3.15 dihydrobromide
Cat. No. : PC-23484
CAS No. : 1281681-33-1
Molecular Formula : C₂₀H₂₄Br₂N₄OS
Molecular Weight : 528.31
Target : Phosphodiesterase (PDE)
Solubility : 10 mM in DMSO



Biological Activity

VP3.15 dihydrobromide is a potent, oral bioavailable and CNS penetrant dual PDE7/GSK-3 inhibitor with IC₅₀ of 1.59 μM (PDE7) and 0.88 μM (GSK-3).

VP3.15 increases intracellular cAMP levels in cells.

VP3.15 is efficacious in the amelioration of the clinical symptoms in EAE mice.

VP3.15 improves in vivo remyelination in mouse and increases both adult mouse and adult human oligodendrocyte progenitor cell (OPC) differentiation, in addition to its immune regulatory action.

VP3.15's dual inhibition is synergistic, as increasing intracellular levels of cAMP by cyclic nucleotide PDE inhibition both suppresses the immune response and increases remyelination, and in addition, inhibition of GSK3 limits experimental autoimmune encephalomyelitis in mice.

References

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Medina-Rodríguez EM, et al. Sci Rep. 2017 Mar 3;7:43545.

Sánchez-Cruz A, et al. Mol Neurodegener. 2018 Apr 16;13(1):19.

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

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