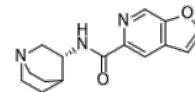


Product Name : PHA-543613
Cat. No. : PC-22783
CAS No. : 478149-53-0
Molecular Formula : C₁₅H₁₇N₃O₂
Molecular Weight : 271.32
Target : nAChR
Solubility : 10 mM in DMSO



Biological Activity

PHA-543613 is a potent, selective agonist of alpha7 neuronal nicotinic acetylcholine receptor ($\alpha 7$ nAChR) with K_i of 8.8 nM, EC₅₀ of 65 nM in cell-based FLIPR assay.

PHA-543613 shows no detectible agonist activity (>100 μ M) and negligible antagonist activity at both muscle-like nAChRs (TE671 cells) and ganglion-like nAChRs (SH-SY5Y cells), as well as $\alpha 4\beta 2$ nAChR subtype.

PHA-543613 is characterized by rapid brain penetration and high oral bioavailability in rat and demonstrates in vivo efficacy in auditory sensory gating and, in an in vivo model to assess cognitive performance, novel object recognition.

References

Wishka DG, et al. J Med Chem. 2006 Jul 13;49(14):4425-36.

Freitas K, et al. Neuropharmacology. 2013 Feb;65:156-64.

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

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