

Data Sheet

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 Product Name
 : (-)-IHCH7041

 Cat. No.
 : PC-72176

 CAS No.
 : 1599089-55-0

 Molecular Formula
 : C₁₀H₂₀N₂O

 Molecular Weight
 : 184.283

Target : Dopamine Receptor Solubility : 10 mM in DMSO



Biological Activity

(–)-IHCH7041 is a potent, selective partial agonist at **DRD2/3** and **5-HT1AR**, with EC50 of 1.38 nM in $G\alpha i1-\gamma 9$ dissociation and 2.75 nM in β -arrestin2 recruitment assays, with negligible 5-HT2AR binding (>100-fold selectivity).

(-)-IHCH7041 exhibits negligible affinities for a large number of tested GPCRs, ion channels and transporters (Ki>500 nM), good affinities for DRD2 and DRD3 (Ki=14.42 nM), and moderate binding to 5-HT1A (Ki=60.62 nM).

(–)-IHCH7041 behaves as a partial agonist in both G-protein signaling and β -arrestin recruitment activities at DRD2, DRD3 and 5-HT1AR.

(–)-IHCH7041 displayed potent antipsychotic activity and has antidepressant properties and reverses cognitive impairmentin mice.

References

Zhangcheng Chen, et al. Nat Neurosci. 2022 Jan;25(1):39-49.

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

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