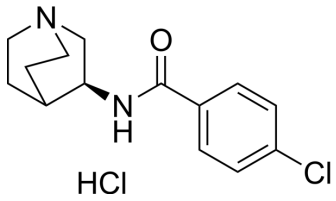
(S)-PNU-282987 hydrochloride

Cat. No.:	HY-12560C
CAS No.:	128311-08-0
Molecular Formula:	$C_{14}H_{18}Cl_2N_2O$
Molecular Weight:	301.21
Target:	nAChR; 5-HT Receptor
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling; GPCR/G Protein
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	(S)-PNU-282987 hydrochloride is an isoform of PNU-282987 (HY-12560). PNU-282987 (free base) is a potent α7 nicotinic acetylcholine receptor (nAChR) agonist with an EC_{50} of 154 nM. PNU-282987 (free base) is also a functional antagonist of the 5-HT_3 receptor with an IC_{50} of 4541 nM. PNU-282987 (free base) can be used for the research of central and peripheral nervous systems[1].
In Vitro	PNU-282987 (free base) (Compound C7) can replace the R7 selective antagonist methylaconitine (MLA) in rat brain homogenate with a K_i of 27 nM[1]. PNU-282987 has α7 nAChR agonist activity with an EC_{50} of 154 nM[1]. PNU-282987 also inhibits the 5-HT_3 receptor with an IC_{50} value of 4541 nM[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	PNU-282987 (free base) (Compound C7) (i.v.; 1, 3 mg/kg) leads to a reversal of the gating deficit[1]. PNU-282987 (30 μM) evokes currents in rat hippocampal neurons in a concentration-dependent and MLA blockable manner [1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Bodnar AL, Discovery and structure-activity relationship of quinuclidine benzamides as agonists of alpha7 nicotinic acetylcholine receptors. J Med Chem. 2005 Feb 24;48(4):905-8.

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