

Product Name : A 582941

Synonyms : —

Cat No. : M22382

CAS Number : 848591-90-2

Molecular Formula : C₁₇H₂₀N₄

Formula Weight : 280.37

Chemical Name : —

Description : A 582941 is a Selective agonist of $\alpha 7$ nAChR partialA-582941 was found to exhibit high-affinity binding and partial agonism at $\alpha 7$ nAChRs. In vitro and in vivo studies indicated that A-582941 activates signaling pathways known to be involved in cognitive function such as ERK1/2 and CREB phosphorylation. A-582941 enhanced cognitive performance in behavioral models that capture domains of working memory, short-term recognition memory, memory consolidation, and sensory gating deficit. A-582941 exhibited a benign secondary pharmacodynamic and tolerability profile as assessed in a battery of assays of cardiovascular, gastrointestinal, and CNS function.

Pathway : Endocrinology/Hormones

Target : AChR

Receptor : $\alpha 7$ nAChR

Solubility : —

SMILES : [H][C@@]12CN(C)C[C@]1([H])CN(C2)c1ccc(n1)-c1ccccc1

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

I.Tietje K R , Anderson D J , Bitner R S , et al. Preclinical Characterization of A-582941: A Novel $\alpha 7$ Neuronal Nicotinic Receptor Agonist with Broad Spectrum Cognition-Enhancing Properties[J]. Cns Neuroence & Therapeutics, 2010, 14(1):65-82.