

PRODUCT INFORMATION



AQW-051

Item No. 41851

CAS Registry No.: 669770-29-0

Formal Name: (3R)-3-[[6-(4-methylphenyl)-3-pyridinyl]oxy]-1-azabicyclo[2.2.2]octane

Synonym: VQW-765

MF: C₁₉H₂₂N₂O

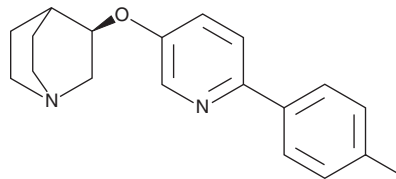
FW: 294.4

Purity: ≥95%

Supplied as: A solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

AQW-051 is supplied as a solid. A stock solution may be made by dissolving the AQW-051 in the solvent of choice, which should be purged with an inert gas. AQW-051 is soluble (≥10 mg/ml) in ethanol.

Description

AQW-051 is a partial agonist of the α7 nicotinic acetylcholine receptor (nAChR).¹ It induces calcium influx in GH3 cells expressing α7 nAChR (EC₅₀ = 38.9 nM). AQW-051 (0.03 or 0.3 mg/kg) improves learning and memory in the social recognition test in mice. It improves learning and memory in the Morris water maze test in rats when administered at a dose of 3 mg/kg. AQW-051 (2, 8, or 15 mg/kg per day) increases the duration of response to L-DOPA-induced increases in coordination in an ovariectomized cynomolgus monkey model of MPTP-induced Parkinson's disease.²

References

1. Feuerbach, D., Pezous, N., Weiss, M., *et al.* AQW051, a novel, potent and selective α7 nicotinic ACh receptor partial agonist: Pharmacological characterization and phase I evaluation. *Br. J. Pharmacol.* **172**(5), (2015).
2. Di Paolo, T., Grégoire, L., Feuerbach, D., *et al.* AQW051, a novel and selective nicotinic acetylcholine receptor α7 partial agonist, reduces L-Dopa-induced dyskinesias and extends the duration of L-Dopa effects in parkinsonian monkeys. *Parkinsonism Relat. Disord.* **20**(11), 1119-1123 (2014).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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