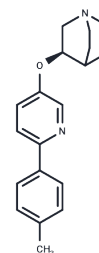


AQW051

## Chemical Properties

CAS No. : 669770-29-0  
Formula: C<sub>19</sub>H<sub>22</sub>N<sub>2</sub>O  
Molecular Weight: 294.39  
Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year  
Actual storage temperature shall be subject to the COA.



## Biological Description

Description	AQW051 (VQW-765) is an orally active alpha-7 nicotinic acetylcholine receptor ( $\alpha$ 7-nAChR) specific activator that interacts with recombinant human $\alpha$ 7-nAChR expression (pKD value 7.56). Alpha7-nachr is considered an attractive target for the treatment of cognitive impairments associated with neurological disorders, so VQW-051 is often used in studies of anxiety disorders and acute anxiety.
Targets(IC50)	AChR
In vitro	AQW-051 binds to recombinant human $\alpha$ 7-nACh receptor with a pKD value of 7.56. AQW051 effectively activated the calcium transient in GH3-ha7-22 cells stimulated by recombinant expression of $\alpha$ 7-nACh receptor, with a pEC50 value of 7.41[1].
In vivo	Mice administered orally with AQW051 at 0.03 and 0.3 mg/kg enhances cognitive effects and learning/memory performance. Orally AQW051 1mg/kg each time in rats increasing the social exploration time, demonstrating the antianxiety effect of AQW051 [1].

## Solubility Information

Solubility	DMSO: 4.4 mg/mL (14.95 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3969 mL	16.9843 mL	33.9685 mL
5 mM	0.6794 mL	3.3969 mL	6.7937 mL
10 mM	0.3397 mL	1.6984 mL	3.3969 mL
50 mM	0.0679 mL	0.3397 mL	0.6794 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

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