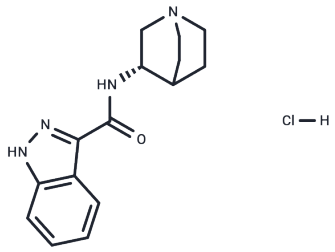
# Data Sheet (Cat.No.T28531)

TargetMol
YOUR TARGET MOLECULES

## Facinicline hydrochloride

### Chemical Properties



CAS No. : 677305-02-1

Formula: C15H19ClN4O

Molecular Weight: 306.79

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

### Biological Description

| | |
|---|---|
| Description | Facinicline hydrochloride (RG3487) is both a novel nicotinic alpha-7 receptor (alpha7nAChR) partial agonist (Ki = 6 nM) and an antagonist of 5-HT3(Ki = 1.2 nM). Facinicline hydrochloride improves cognition and sensorimotor gating in rodents. |
| Targets(IC50) | 5-HT Receptor,AChR |
| In vitro | Facinicline hydrochloride exhibits antagonist properties at the serotonin 3 receptor in oocytes(IC50 = 2.8 μM) and N1E-115 cells(IC50 = 32.7 μM)[2].Facinicline hydrochloride activates human α7 nAChRs in oocytes(EC50 = 0.8 μM) and QM7 cells(EC50 = 7.7 μM)[2]. |
| In vivo | In Male Sprague-Dawley rats, Facinicline hydrochloride (0.1-10 mg/kg p.o.) selectively enhances object recognition memory[1]. Facinicline hydrochloride improves object recognition memory in rats after acute(1.0 mg/kg p.o.) or repeated (10 day) administration at brain and plasma concentrations in the low-nanomolar range[2]. |

### Solubility Information

| | |
|---|---|
| Solubility | H2O: 100 mg/mL (325.96 mM)<br>DMSO: 125 mg/mL (407.44 mM)<br>(< 1 mg/ml refers to the product slightly soluble or insoluble) |

Preparing Stock Solutions

| | 1mg | 5mg | 10mg |
|---|---|---|---|
| 1 mM | 3.2596 mL | 16.2978 mL | 32.5956 mL |
| 5 mM | 0.6519 mL | 3.2596 mL | 6.5191 mL |
| 10 mM | 0.326 mL | 1.6298 mL | 3.2596 mL |
| 50 mM | 0.0652 mL | 0.326 mL | 0.6519 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.

Reference

Boess F, et al. Use of early phenotypic in vivo markers to assess human relevance of an unusual rodent non-genotoxic carcinogen in vitro. Toxicology. 2017 Mar 15;379:48-61.



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