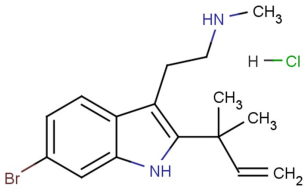
Data Sheet (Cat.No.T11004)

TargetMol
A DRUG SCREENING EXPERT

Desformylflustrabromine hydrochloride

Chemical Properties



CAS No.:	951322-11-5
Formula:	C16H22BrClN2
Molecular Weight:	357.72
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Desformylflustrabromine hydrochloride is a selective agonist of nicotinic acetylcholine receptor (nAChR) in α4β2 neurons, with pEC50 of 6.48.
Targets(IC_{50})	α4β2 nAChR: None
In vitro	Deformyl fluorobromobromide hydrochloride is a selective agonist of nicotinic acetylcholine receptor (nAChR) in α4β2 neurons, with a pEC50 of 6.48. In high-sensitivity (HS) and low-sensitivity (LS) isomer preparations, norformyl fluoroethyl bromide hydrochloride can enhance and inhibit the current induced by ACh, although compared to the HS isomer, the deformyl hydrochloride Fluoroethyl bromide hydrochloride has a higher effect on the LS isomer (pEC50 = 6.4 ± 0.2) (pEC 50 = 5.6 ± 0.2). Norformyl fluoride ethyl bromide hydrochloride can maximize the response induced by ACh using wild-type receptor expressed by HS isoform preparation, up to 350±20%, which is the same as that received by LS isoform preparation. The body (350±30%) is similar.

Solubility Information

Solubility	DMSO: 105 mg/mL (293.53 mM) H2O: 5 mg/mL (13.98 mM) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.795 mL	13.977 mL	27.955 mL
5 mM	0.559 mL	2.795 mL	5.591 mL
10 mM	0.28 mL	1.398 mL	2.795 mL
50 mM	0.056 mL	0.28 mL	0.559 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Nadezhda German, et al. Deconstruction of the α4β2 Nicotinic Acetylchloine (nACh) Receptor Positive Allosteric Modulator des-Formylflustrabromine (dFBr). J Med Chem. 2011 Oct 27;54(20):7259-67.

2. Weltzin MM, et al. Desformylflustrabromine Modulates α4β2 Neuronal Nicotinic Acetylcholine Receptor High- and Low-Sensitivity Isoforms at Allosteric Clefts Containing the β2 Subunit. J Pharmacol Exp Ther. 2015 Aug;354(2):184-94.

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