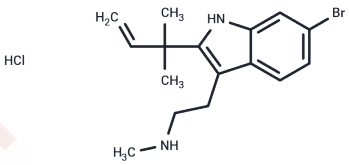
Data Sheet (Cat.No.T11004)

TargetMol

Desformylflustrabromine hydrochloride

Chemical Properties



CAS No. : 951322-11-5

Formula: C17H12INO5

Molecular Weight: 437.19

Appearance: no data available

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

Biological Description

Description	Desformylflustrabromine hydrochloride (dFBr hydrochloride) is a selective agonist of nicotinic acetylcholine receptor (nAChR) in α4β2 neurons, with pEC50 of 6.48.
Targets(IC50)	AChR
In vitro	Desformylflustrabromine hydrochloride potentiates ACh-induced responses of wild-type receptors expressed using the HS isoform preparation maximally by 350±20%, which is similar to receptors expressed via the LS isoform preparation (350±30%).[2] ACh-induced currents are potentiated and inhibited by Desformylflustrabromine hydrochloride in the high sensitivity (HS) and low sensitivity (LS) isoform preparations, although Desformylflustrabromine hydrochloride displays a higher potency on the LS isoform (pEC50=6.4±0.2) compare with the HS isoform (pEC50=5.6±0.2).[2]

Solubility Information

Solubility	H2O: 4.5 mg/mL (12.6 mM),Sonication is recommended. DMSO: 94.5 mg/mL (216.15 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2873 mL	11.4367 mL	22.8734 mL
5 mM	0.4575 mL	2.2873 mL	4.5747 mL
10 mM	0.2287 mL	1.1437 mL	2.2873 mL
50 mM	0.0457 mL	0.2287 mL	0.4575 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

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.
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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