Data Sheet (Cat.No.T11004)

TargetMol

Desformylflustrabromine hydrochloride

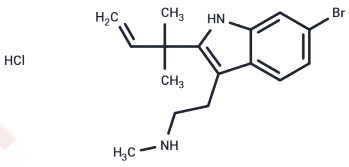
Chemical Properties

CAS No. : 951322-11-5

Formula: C17H12INO5

Molecular Weight: 437.19

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	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 (10.29 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)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (7.55 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

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.

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

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.