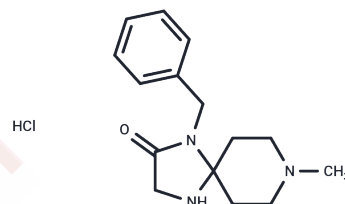


Simufilam hydrochloride

Chemical Properties

CAS No. :	2480226-07-9
Formula:	C ₁₅ H ₂₂ ClN ₃ O
Molecular Weight:	295.81
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	Simufilam (PTI-125) (hydrochloride) is an orally active filamin A (FLNA) activator with low toxicity that can be used in the Alzheimer's disease research. Simufilam (hydrochloride) preferentially binds to altered FLNA and restores its native conformation, restores receptor and synaptic activities, and reduces its $\alpha 7$ nAChR/TLR4 associations and downstream pathologies [1].
Targets(IC50)	Beta Amyloid,Others,Microtubule Associated,iGluR,mTOR
In vitro	Simufilam (1 pM~1 nM) (hydrochloride) dose-dependently improves NMDA/glycine-induced Arc expression [1]. Simufilam (1 nM, 1 hour) (hydrochloride) largely restores filamin A to its native conformation and is effective in normalizing receptor activities in AD frontal cortices. Simufilam (hydrochloride) dose-dependently reduces Ab42-induced FLNA coupling to $\alpha 7$ nAChR and TLR4 in both Ab42-treated control and AD hippocampus. Simufilam (hydrochloride) reduces Ab42's binding affinity for $\alpha 7$ nAChR, thereby prevents Ab42's signaling and further accumulation on $\alpha 7$ nAChRs [1].
In vivo	Simufilam (P.o.; 2 months) (hydrochloride) restores FLNA to its native conformation. Simufilam (22 mg/kg; p.o.) (hydrochloride) robustly reduces FLNA $\alpha 7$ nAChR/TLR4 associations. Simufilam (hydrochloride) significantly improves spatial memory. Simufilam (hydrochloride) significantly improves working memory [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3805 mL	16.9027 mL	33.8055 mL
5 mM	0.6761 mL	3.3805 mL	6.7611 mL
10 mM	0.3381 mL	1.6903 mL	3.3805 mL
50 mM	0.0676 mL	0.3381 mL	0.6761 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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