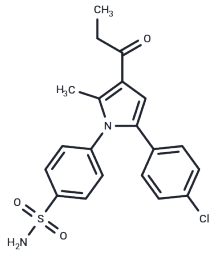
Data Sheet (Cat.No.TQ0117)

TargetMol

A-867744

Chemical Properties



CAS No. : 1000279-69-5

Formula: C20H19ClN2O3S

Molecular Weight: 402.89

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	A-867744 is an effective and selective type II positive allosteric modulator of the α7 nAChR (EC50: 1.0 μM).
Targets(IC50)	AChR,Autophagy
In vitro	A-867744(Compound 19), a novel type II PAM with good potency and selectivity.? Compound 19 showed acceptable pharmacokinetic profile across species and brain levels sufficient to modulate alpha7 nAChRs.?In a rodent model of sensory gating, 19 normalized gating deficits.?These results suggest that 19 represents a novel class of molecules capable of allosteric modulation of the alpha7 nAChRs[2].

Solubility Information

Solubility	DMSO: 150 mg/mL (372.31 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: 4 mg/mL (9.93 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	2.4821 mL	12.4103 mL	24.8207 mL
5 mM	0.4964 mL	2.4821 mL	4.9641 mL
10 mM	0.2482 mL	1.241 mL	2.4821 mL
50 mM	0.0496 mL	0.2482 mL	0.4964 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

Malysz J, et al. In vitro pharmacological characterization of a novel allosteric modulator of alpha 7 neuronal acetylcholine receptor, 4-(5-(4-chlorophenyl)-2-methyl-3-propionyl-1H-pyrrol-1-yl)benzenesulfonamide (A-867744), exhibiting unique pharmacological profile. J Pharmacol Exp Ther. 2009 Jul;330(1):257-67.
Faghih R, et al. Discovery of 4-(5-(4-chlorophenyl)-2-methyl-3-propionyl-1H-pyrrol-1-yl)benzenesulfonamide (A-867744) as a novel positive allosteric modulator of the alpha7 nicotinic acetylcholine receptor. J Med Chem. 2009 May 28;52(10):3377-84.