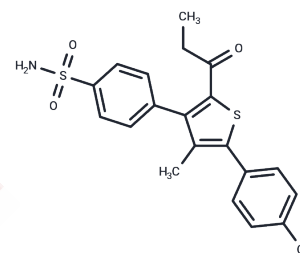


## nAChR agonist 1

## Chemical Properties

CAS No. :	1394371-75-5
Formula:	C <sub>20</sub> H <sub>18</sub> ClNO <sub>3</sub> S <sub>2</sub>
Molecular Weight:	419.94
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	nAChR agonist 1 (DUN71755) is a brain-permeable and orally efficacious positive allosteric $\alpha 7$ nicotinic acetylcholine receptor ( $\alpha 7$ nAChR) modulator.
Targets(IC <sub>50</sub> )	AChR
In vivo	nAChR agonist 1 (compound 28) is a novel PAM of $\alpha 7$ nicotinic acetylcholine receptor ( $\alpha 7$ nAChR). Compound 28 showed good in vitro potency, with pharmacokinetic profile across species with excellent brain penetration and residence time. Compound 28 robustly reversed the cognitive deficits in episodic/working memory in both time-delay and scopolamine-induced amnesia paradigms in the novel object and social recognition tasks, at very low dose levels.

## Solubility Information

Solubility	DMSO: 120 mg/mL (285.76 mM), Sonication is recommended. ( $< 1$ mg/ml refers to the product slightly soluble or insoluble)
------------	---

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.3813 mL	11.9065 mL	23.8129 mL
5 mM	0.4763 mL	2.3813 mL	4.7626 mL
10 mM	0.2381 mL	1.1906 mL	2.3813 mL
50 mM	0.0476 mL	0.2381 mL	0.4763 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

Sinha N, et al. Discovery of Novel, Potent, Brain-Permeable, and Orally Efficacious Positive Allosteric Modulator of  $\alpha 7$  Nicotinic Acetylcholine Receptor [4-(5-(4-Chlorophenyl)-4-methyl-2-propionylthiophen-3-yl) benzenesulfonamide]: Structure-Activity Relationship and Preclinical Characterization. J Med Chem. 2020 Feb 13; 63(3):944-960.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

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

Tel: 781-999-4286 E\_mail: info@targetmol.com Address: 34 Washington Street, Wellesley Hills, MA 02481