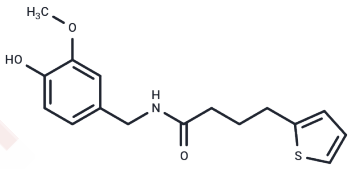
Data Sheet (Cat.No.T28118)

TargetMol

MSP3

Chemical Properties



CAS No. : 1820968-63-5

Formula: C16H19NO3S

Molecular Weight: 305.39

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	MSP3 is an agonist of TRPV1 (EC50 = 0.87 μM) and shows antinociceptive and neuroprotective effects.
Targets(IC50)	TRP/TRPV Channel

Solubility Information

Solubility	DMSO: 50 mg/mL (163.73 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2745 mL	16.3725 mL	32.745 mL
5 mM	0.6549 mL	3.2745 mL	6.549 mL
10 mM	0.3275 mL	1.6373 mL	3.2745 mL
50 mM	0.0655 mL	0.3275 mL	0.6549 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

Aiello F, et, al. Design and Synthesis of New Transient Receptor Potential Vanilloid Type-1 (TRPV1) Channel Modulators: Identification, Molecular Modeling Analysis, and Pharmacological Characterization of the N-(4-Hydroxy-3-methoxybenzyl)-4-(thiophen-2-yl)butanamide, a Small Molecule Endowed with Agonist TRPV1 Activity and Protective Effects against Oxidative Stress. ACS Chem Neurosci. 2016 Jun 15;7(6):737-48.

Sha X, Lin J, Wu K, et al.The TRPV1-PKM2-SREBP1 axis maintains microglial lipid homeostasis in Alzheimer's disease.Cell Death & Disease.2025, 16(1): 14.

The TRPV1-PKM2-SREBP1 axis maintains microglial lipid homeostasis in Alzheimer's disease[J]. Cell Death & Disease, 2025, 16(1): 14.