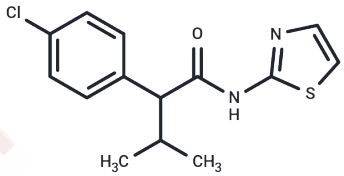
Data Sheet (Cat.No.T8642)

TargetMol

4-CMTB

Chemical Properties



CAS No. : 300851-67-6

Formula: C14H15ClN2OS

Molecular Weight: 294.8

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	4-CMTB is a selective agonist of FFA2 and GPR43.It also is a positive allosteric modulator (pEC50=6.38).
Targets(IC50)	GPCR

Solubility Information

Solubility	DMSO: 100 mg/mL (339.21 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 (13.57 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	3.3921 mL	16.9607 mL	33.9213 mL
5 mM	0.6784 mL	3.3921 mL	6.7843 mL
10 mM	0.3392 mL	1.6961 mL	3.3921 mL
50 mM	0.0678 mL	0.3392 mL	0.6784 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

Milligan G, Stoddart LA, Smith NJ. Agonism and allosterism: the pharmacology of the free fatty acid receptors FFA2 and FFA3. Br J Pharmacol. 2009;158(1):146-153.
Tian P, Yang W, Guo X, et al.Early life gut microbiota sustains liver-resident natural killer cells maturation via the butyrate-IL-18 axis.Nature Communications.2023, 14(1): 1-16.
Pfanzagl B, Jensen-Jarolim E.Contrary effects of the gut metabolites deoxycholate and butyrate on the acetylcholine-evoked calcium response in an enteroendocrine cell model.Endocrine and Metabolic Science.2024: 100167.