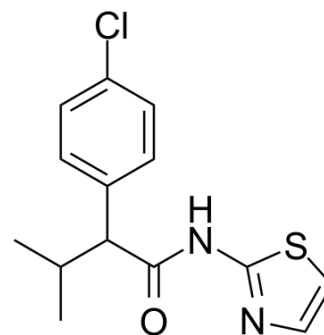


## 4-CMTB

Cat. No.:	HY-P1125
CAS No.:	300851-67-6
Molecular Formula:	C <sub>14</sub> H <sub>15</sub> ClN <sub>2</sub> OS
Molecular Weight:	294.8
Target:	Others
Pathway:	Others
Storage:	4°C, protect from light
	* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (339.21 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	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	
Please refer to the solubility information to select the appropriate solvent.					
In Vivo	1. Add each solvent one by one: <b>10% DMSO &gt;&gt; 40% PEG300 &gt;&gt; 5% Tween-80 &gt;&gt; 45% saline</b> Solubility: ≥ 2.5 mg/mL (8.48 mM); Clear solution  2. Add each solvent one by one: <b>10% DMSO &gt;&gt; 90% corn oil</b> Solubility: ≥ 2.5 mg/mL (8.48 mM); Clear solution				

### BIOLOGICAL ACTIVITY

Description	4-CMTB is a selective <b>free fatty acid receptor 2 (FFA2/GPR43)</b> agonist and a positive allosteric modulator (pEC <sub>50</sub> = 6.38) <sup>[1]</sup> .
In Vitro	4-CMTB is both a direct agonist and a positive allosteric modulator of the action of short-chain free fatty acids. 4-CMTB modulates the activity of short-chain fatty acids at FFA2 via the FFA2 second extracellular loop (ECL2) <sup>[1][2]</sup> .

### REFERENCES

[1]. Smith NJ, et al. Extracellular loop 2 of the free fatty acid receptor 2 mediates allosterism of a phenylacetamide ago-allosteric modulator. Mol Pharmacol. 2011;80(1):163-173.

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[2]. 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.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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