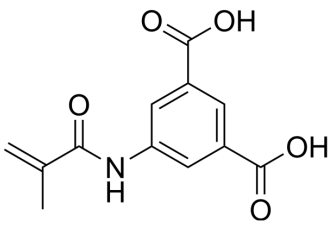
MS15203

Cat. No.:	HY-116797
CAS No.:	73912-52-4
Molecular Formula:	$C_{12}H_{11}NO_5$
Molecular Weight:	249.22
Target:	GPR171
Pathway:	GPCR/G Protein
Storage:	4°C, protect from light * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



SOLVENT & SOLUBILITY

In Vitro

DMSO : 50 mg/mL (200.63 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	4.0125 mL	20.0626 mL	40.1252 mL
	5 mM	0.8025 mL	4.0125 mL	8.0250 mL
	10 mM	0.4013 mL	2.0063 mL	4.0125 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (10.03 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (10.03 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

MS15203 is a potent and selective GPR171 agonist. MS15203 increases food intake and body weight. MS15203 increases neuronal activity. MS15203 significantly increases the abundance of the mRNAs encoding proSAAS, NPY, AgRP[1].

In Vitro

MS15203 (MS0015203) dose-dependently increases [$^{[35]}$S]GTPγS binding and inhibits adenylyl cyclase activity in rat hypothalamic membranes[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

MS15203 (MS0015203) (3 mg/kg; i.p.) causes an increase in neuronal activity within cells containing GPR171 in the PVN[1].
.MS15203 (3 mg/kg; i.p.) significantly increases food intake at 4 and 8 hours[1].
MS15203 (3 mg/kg; i.p.) significantly increases the abundance of the mRNAs encoding proSAAS, NPY, AgRP[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Wardman JH, et al. Identification of a small-molecule ligand that activates the neuropeptide receptor GPR171 and increases food intake. Sci Signal. 2016 May 31;9(430):ra55.

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