**Proteins** 

## ATC0175

Cat. No.: HY-107624 CAS No.: 510733-97-8 Molecular Formula:  $\mathsf{C_{23}H_{26}ClF_2N_5O}$ Molecular Weight: 461.94

Target: MCHR1 (GPR24)

Pathway: GPCR/G Protein; Neuronal Signaling Storage: 4°C, sealed storage, away from moisture

\* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

## **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 12.5 mg/mL (27.06 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.1648 mL	10.8239 mL	21.6478 mL
	5 mM	0.4330 mL	2.1648 mL	4.3296 mL
	10 mM	0.2165 mL	1.0824 mL	2.1648 mL

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

## **BIOLOGICAL ACTIVITY**

Description	ATC0175 is a potent, selective and orally active melanin-concentrating hormone 1 recepter antagonist with IC <sub>50</sub> s of 13.5, >10000 nM for MCH1R, MCH2R, respectively. ATC0175 shows antidepressant effects and anxiolytic effects in animal models. ATC0175 has the potential for the research of depression and/or anxiety disorders <sup>[1]</sup> .			
IC <sub>50</sub> & Target	IC <sub>50</sub> : 13.5 nM (MCH1R); >10000 nM (MCH2R) <sup>[1]</sup> .			
In Vitro	ATC0175 shows affinity for 5-HT2B and 5-HT1A with IC <sub>50</sub> s of 9.66 and 16.9 nM respectively <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.			
In Vivo	ATC0175 (1, 3, 10 mg/kg; p.o.) significantly and dose-dependently reduces immobility time, indicating antidepressant like potential <sup>[1]</sup> .  MCE has not independently confirmed the accuracy of these methods. They are for reference only.			

## **REFERENCES**

[1]. Chaki S, Yamaguchi J, Yam potential treatment of depress			i: an orally active melanin-concentrating	g hormone receptor 1 antagonist for the
	Caution: Product has I	not been fully validated for m	edical applications. For research u	se only.
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