MCH(human, mouse, rat) TFA

Cat. No.: HY-P1205A

Molecular Formula: $C_{107}H_{161}F_3N_{30}O_{28}S_4$

Molecular Weight: 2500.86

Sequence Shortening: DFDMLRCMLGRVYRPCWQV (Disulfide bridge:Cys7-Cys16)

DFDMLRCMLGRVYRPCWQV (Disulfide bridge:Cys_7-Cys_{16}) (TFA salt)

Target: MCHR1 (GPR24)

Pathway: GPCR/G Protein; Neuronal Signaling

Storage: Sealed storage, away from moisture

Powder	-80°C	2 years
	-20°C	1 year

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

SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (39.99 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	0.3999 mL	1.9993 mL	3.9986 mL
5 mM	0.0800 mL	0.3999 mL	0.7997 mL
10 mM	0.0400 mL	0.1999 mL	0.3999 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 (1.00 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (1.00 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (1.00 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

MCH (human, mouse, rat) TFA is a potent peptide agonist of MCH-R and exhibits binding IC_{50} values of 0.3nM and 1.5 nM for MCH1R and MCH2R, respectively. MCH (human, mouse, rat) is a highly sensitive to MCH-2R in a CHO cell line and monitoring mobilization of intracellular calcium with FLIPR, exhibits functional activation EC_{50} values of 3.9 nM and 0.1nM for human MCH-1R and MCH-2R, respectively[1].

IC_{50} & Target

Binding IC50: 0.3 nM (MCH1R)
IC50: 1.5 nM (MCH1R)[1]

REFERENCES

[1]. A W Sailer, et al. Identification and characterization of a second melanin-concentrating hormone receptor, MCH-2R. Proc Natl Acad Sci U S A. 2001 Jun 19;98(13):7564-9.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA