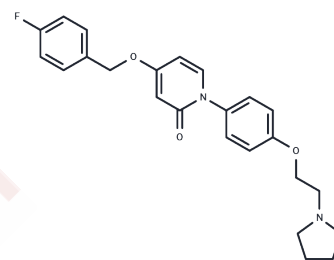


## TC-MCH 7c

## Chemical Properties

CAS No. : 864756-35-4  
 Formula: C<sub>24</sub>H<sub>25</sub>FN<sub>2</sub>O<sub>3</sub>  
 Molecular Weight: 408.47  
 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	TC-MCH 7c is an oral, selectable and blood-brain barrier penetrating MCH1R antagonist with IC <sub>50</sub> performance of 5.6 nM against hMCH1R, and TC-MCH 7c is a phenylpyridone derivative with MCH1R K <sub>i</sub> of 3.4 nM against human. In mice, MCH1R K <sub>i</sub> was 3.0 nM.
Targets(IC <sub>50</sub> )	Melanin-concentrating Hormone Receptor (MCHR),GPCR
In vitro	In [Ca <sup>2+</sup> ] <sub>i</sub> mobilization, TC-MCH 7c has an IC <sub>50</sub> of 9.7 μM for MCH1R [1]. TC-MCH 7c has IC <sub>50</sub> s of 23 nM and 9.0 μM for FLIPR and hERG, respectively[2].
In vivo	In DIO mice model, TC-MCH 7c (oral; 3-30 mg/kg; once-daily for 1.5 months) shows excellent body weight reduction in a dose-dependent manner [1]. TC-MCH 7c(oral; 3 to 30mg /kg) and 30mg /kg at 2, 15 and 24 h were 5.1, 1.8 and 0.7 μM, respectively[2].

## Solubility Information

Solubility	DMSO: 62.5 mg/mL (153.01 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: 6.25 mg/mL (15.3 mM),Solution. 10% DMSO+90% Saline: < 6.25 mg/mL (15.3 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. <i>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.</i>

### Preparing Stock Solutions

---

	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	2.4482 mL	12.2408 mL	24.4816 mL
5 mM	0.4896 mL	2.4482 mL	4.8963 mL
10 mM	0.2448 mL	1.2241 mL	2.4482 mL
50 mM	0.049 mL	0.2448 mL	0.4896 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

Ito M, et al. Melanin-concentrating hormone 1-receptor antagonist suppresses body weight gain correlated with high receptor occupancy levels in diet-induced obesity mice. *Eur J Pharmacol.* 2009 Dec 10;624(1-3):77-83.  
Haga Y, et al. Discovery of novel phenylpyridone derivatives as potent and selective MCH1R antagonists. *Bioorg Med Chem.* 2011 Jan 15;19(2):883-93.

**Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins**

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E\_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481