Product Data Sheet

Macimorelin acetate

Cat. No.: HY-14820A CAS No.: 945212-59-9 Molecular Formula: $C_{28}H_{34}N_6O_5$ Molecular Weight: 534.61 Target: **GHSR**

Pathway: GPCR/G Protein

Storage: Powder -20°C 3 years

2 years

In solvent -80°C 6 months

> -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

DMSO: 100 mg/mL (187.05 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.8705 mL	9.3526 mL	18.7052 mL
	5 mM	0.3741 mL	1.8705 mL	3.7410 mL
	10 mM	0.1871 mL	0.9353 mL	1.8705 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 (4.68 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (4.68 mM); Clear solution

BIOLOGICAL ACTIVITY

Description Macimorelin (EP-1572) acetate, a GH secretagogue, is an orally active GHSR agonist. Macimorelin acetate stimulates GH release. Macimorelin acetate can be used in the research of adult growth hormone deficiency (AGHD), and Cancer anorexiacachexia syndrome (CACS)[1][2][3].

IC₅₀ & Target

 $\mathsf{GHSR}^{[1]}$

In Vivo

Macimorelin (5 mg/kg, i.p. twice daily for 2 weeks) acetate decreased the number and duration of seizures in IHKA mouse model^[2].

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

Animal Model:	Intrahippocampal kainic acid (IHKA) mouse model ^[2]	
Dosage:	5 mg/kg	
Administration:	Intraperitoneal injection (i.p.), twice daily for 2 weeks.	
Result:	Significantly decreased the number and duration of seizures during the treatment period, but had no antiepileptogenic or disease-modifying effect.	

REFERENCES

- [1]. Jose M Garcia, et al. Macimorelin as a Diagnostic Test for Adult GH Deficiency. J Clin Endocrinol Metab. 2018 Aug 1;103(8):3083-3093.
- [2]. An Buckinx, et al. Translational potential of the ghrelin receptor agonist macimorelin for seizure suppression in pharmacoresistant epilepsy. Eur J Neurol. 2021 Sep;28(9):3100-3112.
- [3]. Ali SA, Garcia JM. Randomized clinical trial of the novel oral ghrelin mimetic macimorelin in the treatment of cancer cachexia: study design and preliminary results. Endocr Rev. 2013;34:

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

Tel: 609-228-6898

Fax: 609-228-5909

 $\hbox{E-mail: } tech @ Med Chem Express.com$

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