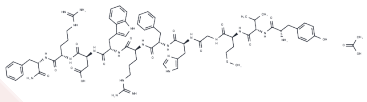
Data Sheet (Cat.No.TP1002L)

TargetMol

γ-1-MSH, amide acetate (72629-65-3 free base)

Chemical Properties



CAS No. :

Formula: C74H101N21O16S

Molecular Weight: 1572.81

Storage: Keep away from moisture
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	γ-1-MSH, amide acetate (72629-65-3 free base), a putative hormone in the N-terminal region of the ACTH/beta- endorphin (beta-EP) precursor protein, was studied by RIA with an antiserum against gamma 3-MSH in ACTH-producing mouse pituitary tumor cells, AtT-20/D16v.
Targets(IC50)	Others
In vitro	γ-Melanocyte Stimulating Hormone (γ-MSH) regulates a multitude of metabolic functions including energy homeostasis, food intake, sodium (Na+) balance, and blood pressure regulation. γ-MSH is processed from the precursor hormone pro-opio-melanocortin (POMC) in the pituitary gland, where component peptides are released into the cerebral spinal fluid and systemic circulation. The natural receptor for γ-MSH is the melanocortin receptor 3 (MC3-R), a G-protein-coupled receptor that activates adenylate cyclase and is expressed in brain (hypothalamus, cortex, and thalamus), gut, placenta, and kidney. γ-MSH regulates Na+ balance by inducing urinary Na+ excretion (natriuresis) under conditions of high dietary salt intake[1].

Solubility Information

Solubility	DMSO: 10 mM,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.6358 mL	3.179 mL	6.358 mL
5 mM	0.1272 mL	0.6358 mL	1.2716 mL
10 mM	0.0636 mL	0.3179 mL	0.6358 mL
50 mM	0.0127 mL	0.0636 mL	0.1272 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

Kathpalia PP, et al. The natriuretic mechanism of Gamma-Melanocyte-Stimulating Hormone. Peptides. 2011 May; 32(5):1068-72.