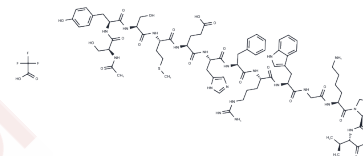


α -MSH TFA

Chemical Properties

CAS No. :	171869-93-5
Formula:	C79H110F3N21O21S
Molecular Weight:	1778.93
Storage:	Keep away from moisture Powder: -20°C for 3 years In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



Biological Description

Description	α -Melanocyte-stimulating hormone (α -MSH) is a 13-amino acid peptide hormone produced by post-translational processing of proopiomelanocortin (POMC) in the pituitary gland, as well as in keratinocytes, astrocytes, monocytes, and gastrointestinal cells. It is an agonist of melanocortin receptor 3 (MC3R) and MC4R that induces cAMP production in Hepa cells expressing the human receptors (EC50s = 0.16 and 56 nM, respectively). 2 α -MSH (100 pM) reduces <i>S. aureus</i> colony formation and <i>C. albicans</i> germ tube formation in vitro. It inhibits endotoxin-, ceramide-, TNF- α -, or okadaic acid-induced activation of NF- κ B in U937 cells. 1 α -MSH reduces IL-6- or TNF- α -induced ear edema in mice. It also prevents the development of adjuvant-induced arthritis in rats and increases survival in a mouse model of septic shock. Increased plasma levels of α -MSH are positively correlated with delayed disease progression and reduced death in patients with HIV.1
Targets(IC50)	Melanocortin Receptor

Solubility Information

Solubility	DMF: 10 mg/mL (5.62 mM), Sonication is recommended. DMSO: 25 mg/mL (14.05 mM), Sonication is recommended. DMSO:PBS (pH 7.2) (1:5): 0.16 mg/mL (0.09 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.5621 mL	2.8107 mL	5.6214 mL
5 mM	0.1124 mL	0.5621 mL	1.1243 mL
10 mM	0.0562 mL	0.2811 mL	0.5621 mL
50 mM	0.0112 mL	0.0562 mL	0.1124 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

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- Cutuli, M., Cristiani, S., Lipton, J.M., et al. Antimicrobial effects of α -MSH peptides *J. Leukoc. Biol.* 67(2)233-239(2000)
- Lipton, J.M., Ceriani, G., Macaluso, A., et al. Antiinflammatory effect of the neuropeptide α -MSH in acute, chronic, and systemic inflammation *Ann. N.Y. Acad. Sci.* 25(741)137-148(1994)

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