

Product Data Sheet

Product Name: Selank (acetate)

Cat. No.: GC45684

Chemical Properties

Cas. No. 2703745-90-6

SMILES O=C([C@@H]1CCCN1C(CNC([C@@H]2CCCN2C([C@@H](NC([C@@H]3CCCN3C([C@@H](NC([C@H]([C@H](O)C)N)=O)CCCCN)=O)=O)CCCNC(N)=N)=O)=O)O.O.C(C)=O

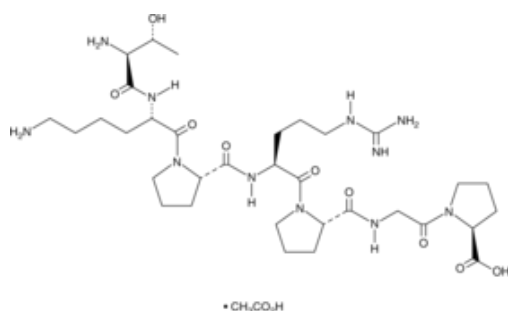
Formula C33H57N11O9.C2H4O2 M.Wt 811.9

Solubility PBS (pH 7.2): 10mg/mL Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Background

Selank is a synthetic derivative of the tetrapeptide tuftsin that contains a proline-glycine-proline sequence at the C-terminus and has anxiolytic and anti-inflammatory activities.^{1,2,3,4} It increases the amplitude and discharge rate of inhibitory postsynaptic currents of neurons in the rat hippocampal CA1 region when used at a concentration of 1 μM.¹ It decreases the level of affective responses and the number of erroneous escape attempts in rats in an acute stress situation, increases orientational-investigative responses of rats in an unfamiliar situation, and reduces the time mice spend immobile in the forced swim test.² It increases locomotor activity of high-anxiety Balb/c, but not C57Bl/6, mice in the open field test. Selank (0.01 mg/kg) decreases verticalization induced by apomorphine in mice.³ It also decreases expression of the inflammation-related genes Il2rg and Xcr1 in mouse

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

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spleen after 90 minutes when administered at a dose of 100 µg/kg.⁴

|1. Povarov, I.S., Kondratenko, R.V., Derevyagin, V.I., et al. Effect of Selank on spontaneous synaptic activity of rat hippocampal CA1 neurons. Bull. Exp. Biol. Med. 162(5), 640-642 (2017).|2. Kozlovskaya, M.M., Kozlovskii, I.I., Val'dman, E.A., et al. Selank and short peptides of the tuftsin family in the regulation of adaptive behavior in stress. Neurosci. Behav. Physiol. 33(9), 853-860 (2003).|3. Meshavkin, K.V., Kost, N.V., Sokolov, O.Y., et al. Naloxone-blocked depriming effect of anxiolytic selank on apomorphine-induced behavioral manifestations of hyperfunction of dopamine system. Bull. Exp. Biol. Med. 142(5), 598-600 (2006).|4. Kolomin, T., Morozova, M., Volkova, A., et al. The temporary dynamics of inflammation-related genes expression under tuftsin analog Selank action. Mol. Immunol. 58(1), 50-55 (2014).

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