

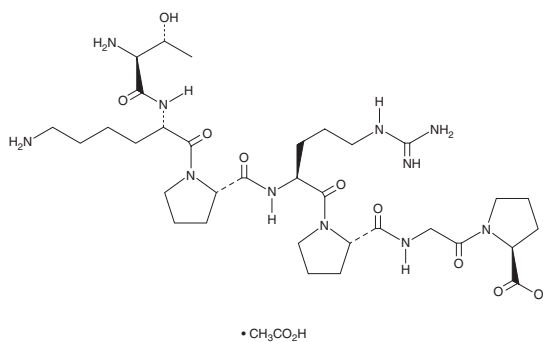
PRODUCT INFORMATION



Selank (acetate)

Item No. 27720

CAS Registry No.: 2703745-90-6
Formal Name: L-threonyl-L-lysyl-L-prolyl-L-arginyl-L-prolylglycyl-L-proline, monoacetate
MF: C₃₃H₅₇N₁₁O₉ • C₂H₄O₂
FW: 811.9
Purity: ≥98%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Selank (acetate) is supplied as a crystalline solid. Aqueous solutions of selank (acetate) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of selank (acetate) in PBS, (pH 7.2), is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

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.¹⁻⁴ 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 (Item No. 16094) in mice.³ It also decreases expression of the inflammation-related genes *Il2rg* and *Xcr1* in mouse spleen after 90 minutes when administered at a dose of 100 μg/kg.⁴

References

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 depriving 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).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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