

PRODUCT INFORMATION



KEMPFKYPVEP Peptide (bovine, ovine) (trifluoroacetate salt)

Item No. 38850

Formal Name:	L-lysyl-L- α -glutamyl-L-methionyl-L-prolyl-L-phenylalanyl-L-prolyl-L-lysyl-L-tyrosyl-L-prolyl-L-valyl-L- α -glutamyl-L-proline, trifluoroacetate salt	H-Lys—Glu—Met—Pro—Phe—Pro—Lys—Tyr—Pro—Val—
Peptide Sequence:	KEMPFKYPVEP-OH	Glu—Pro—OH
MF:	C ₇₀ H ₁₀₄ N ₁₄ O ₁₈ S • XCF ₃ COOH	
FW:	1,461.7	• XCF ₃ COOH
Purity:	≥95%	
Supplied as:	A 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

KEMPFKYPVEP Peptide (bovine, ovine) (trifluoroacetate salt) is supplied as a solid. A stock solution may be made by dissolving the KEMPFKYPVEP peptide (bovine, ovine) (trifluoroacetate salt) in water. We do not recommend storing the aqueous solution for more than one day.

Description

KEMPFKYPVEP Peptide is a peptide fragment of the dairy protein β -casein.^{1,2} It can be produced by the protease M from *A. oryzae* and is found in dairy products fermented by fungi but not bacteria.¹ KEMPFKYPVEP Peptide (2 mg/kg) increases the levels of dopamine, norepinephrine, and homovanillic acid, but not serotonin, in the frontal cortex of mice. It improves spatial alternation retention in the Y-maze spatial alternation task and increases novel object exploration time in a novel object recognition test in a mouse model of scopolamine-induced amnesia when administered at a dose of 2 mg/kg.

References

1. Ano, Y., Kutsukake, T., Sasaki, T., *et al.* Identification of a novel peptide from β -casein that enhances spatial and object recognition memory in mice. *J. Agric. Food Chem.* **67(29)**, 8160-8167 (2019).
2. Atamer, Z., Post, A.E., Schubert, T., *et al.* Bovine β -casein: Isolation, properties and functionality. A review. *Int. Dairy J.* **66**, 115-125 (2017).

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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