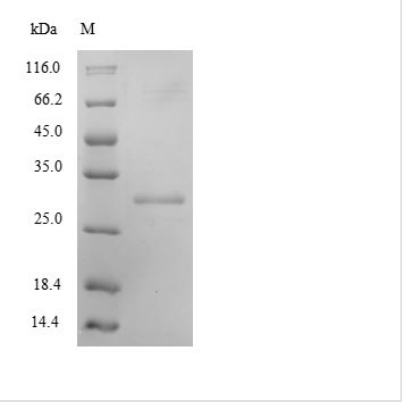
Recombinant Mouse Kallikrein-8 (Klk8)

Product Code	CSB-EP720268MO
Relevance	Serine protease which is capable of degrading a number of proteins such as casein, fibrinogen, kininogen, fibronectin and collagen type IV. Also cleaves L1CAM in response to increased neural activity. Induces neurite outgrowth and fasciculation of cultured hippocampal neurons. Plays a role in the formation and maturation of orphan and small synaptic boutons in the Schaffer-collateral pathway, regulates Schaffer-collateral long-term potentiation in the hippocampus and is required for memory acquisition and synaptic plasticity. Involved in skin desquamation and keratinocyte proliferation. Plays a role in the secondary phase of pathogenesis following spinal cord injury.
Abbreviation	Recombinant Mouse Klk8 protein
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
Uniprot No.	Q61955
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	ILEGRECIPHSQPWQAALFQGERLICGGVLVGDRWVLTAAHCKKQKYSVRLG DHSLQSRDQPEQEIQVAQSIQHPCYNNSNPEDHSHDIMLIRLQNSANLGDKVK PVQLANLCPKVGQKCIISGWGTVTSPQENFPNTLNCAEVKIYSQNKCERAYPG KITEGMVCAGSSNGADTCQGDSGGPLVCDGMLQGITSWGSDPCGKPEKPGV YTKICRYTTWIKKTMDNRD
Research Area	Signal Transduction
Source	E.coli
Target Names	Klk8
Protein Names	Neuropsin
Expression Region	33-260aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-tagged
Mol. Weight	29.1kDa
Protein Length	Full Length of Mature Protein
Image	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

Description

The region for expressing recombinant Mouse Klk8 contains amino acids 33-260. The theoretical molecular weight of the Klk8 protein is 29.1 kDa. The Klk8 protein was expressed in e.coli. Fusion of the N-terminal 6xHis tag into the Klk8 encoding gene fragment was conducted, allowing for easier detection and purification of the Klk8 protein in subsequent stages.

Mouse kallikrein-8 (Klk8) is a serine protease mainly involved in the regulation of skin desquamation and antimicrobial defense through proteolytic activity. Studying Klk8 provides insights into skin homeostasis, neurobiology, and cancer biology, offering potential applications in dermatology, neurodegenerative disease research, and cancer therapy. In neuroscience, Klk8 participates in synaptic plasticity and cognitive function. Its dysregulation is associated with neurodegenerative disorders. In cancer research, Klk8 is a potential biomarker for ovarian and breast cancers. Understanding Klk8's multifaceted roles contributes to advancements in various research areas and offers avenues for therapeutic interventions in relevant physiological and pathological conditions.

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

Shelf Life

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