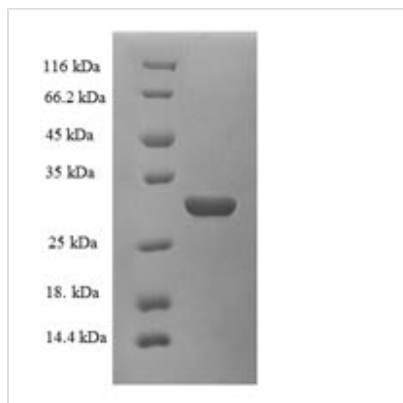




Recombinant Rat Plasma kallikrein (Klkb1),Partial

Product Code	CSB-EP012461RA
Relevance	The enzyme cleaves Lys-Arg and Arg-Ser bonds. It activates, in a reciprocal reaction, factor XII after its binding to a negatively charged surface. It also releases bradykinin from HMW kininogen and may also play a role in the renin-angiotensin syst by converting prorenin into renin.
Abbreviation	Recombinant Rat Klkb1 protein, partial
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.	P14272
Alias	Fletcher factorKininogenin;Plasma prekallikrein
Product Type	Recombinant Protein
Immunogen Species	Rattus norvegicus (Rat)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	IVGGTNSSLGEWPWQVSLQVKLVSQNHMCGGSIIGRQWILTAAHCFDGIYPYD VWRIYGGILNLSEITNKTPFSSIKELIHKYKMSEGSYDIALIKLQTPLNYTEFQK PICLPSKADTNTIYTNCWVTGWGYTKERGETQNILQKATIPLVPNEECQKKYRD YVITKQMICAGYKEGGIDACKGDSGGPLVCKHSGRWQLVGITSWGEGCARKE QPGVYTKVAEYIDWILEKIQSSKERALETSPA
Source	E.coli
Target Names	Klkb1
Expression Region	391-638aa
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	31.8kDa
Protein Length	Plasma kallikrein light chain
Image	



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

Description

This Recombinant Rat Plasma kallikrein (Klkb1) (partial) is the Plasma kallikrein light chain corresponding to the amino acid sequence of 391-638. E.coli-expressed recombinant Klkb1 protein was fused with an N-terminal 6xHis-tag. It has a high purity (>90%) measured by SDS-PAGE. Based on the below functions, this Klkb1 protein may find uses in the studies of Klkb1-targeted MS therapeutic development and research.

Klkb1 is a specific direct regulator of blood-brain barrier (BBB) integrity. In the active central nervous system (CNS) lesions of patients with multiple sclerosis (MS), klkb1 precursor plasma kinin (PK) levels were significantly increased. PK deficiency or pharmacologic blockade makes the mice less prone to experimental autoimmune encephalomyelitis and is accompanied by a significant reduction of BBB destruction and CNS inflammation. Klkb1 inhibition can decrease cell invasion during neuroinflammation, which may provide a strategy against Ms.

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

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.