



Recombinant Human Plasma kallikrein (KLKB1), partial

Product Code	CSB-EP012461HU-B
Storage	Store at -20°C, for extended storage, conserve at -20°C or -80°C.
Uniprot No.	P03952
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	>85% (SDS-PAGE)
Sequence	G CLTQLYENAF FRGGDVASMY TPNAQYCQMR CTFHPRCLLF SFLPASSIND MEKRFGCFLK DSVTGTLPKV HRTGAVSGHS LKQCGHQISA CHRDIYKGVD MRGVNFNVS K VSSVEECQKR CTNNIRCQFF SYATQTFHKA EYRNNCLLKY SPGGTPTAIK VLSNVEGFS LKPCALSEIG CHMNIFQHLA FSDVDVARVL TPDAFVCR TI CTYHPNCLFF TFYTNVWKIE SQRNVCLLKT SESGTPSSST PQENTISGYS LLTCKRTLPE PCHSKIYPGV DFGGEELNVT FVKGVNVCQE TCTKMIRCQF FTYSLLPEDC KEEKCKCFLR LSMDGSPTRI AYGTQGSSGY SLRLCNTGDN SVCTTKTSTR
Source	E.coli
Target Names	KLKB1
Protein Names	Recommended name: Plasma kallikrein EC= 3.4.21.34 Alternative name(s): Fletcher factor Kininogenin Plasma prekallikrein Cleaved into the following 2 chains: 1. Plasma kallikrein heavy chain 2. Plasma kallikrein light chain
Expression Region	20-390
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	Tag type will be determined during the manufacturing process.
Protein Length	Partial
Target Details	Plasma prekallikrein is a glycoprotein that participates in the surface-dependent activation of blood coagulation, fibrinolysis, kinin generation and inflammation. It is synthesized in the liver and secreted into the blood as a single polypeptide chain. Plasma prekallikrein is converted to plasma kallikrein by factor XIIa by the cleavage of an internal Arg-Ile bond. Plasma kallikrein therefore is composed of a heavy chain and a light chain held together by a disulphide bond. The heavy chain originates from the amino-terminal end of the zymogen and contains 4 tandem repeats of 90 or 91 amino acids. Each repeat harbors a novel structure called the apple domain. The heavy chain is required for the surface-dependent pro-coagulant activity of plasma kallikrein. The light chain contains the active site or catalytic domain of the enzyme and is homologous to the trypsin family of serine proteases. Plasma prekallikrein deficiency causes a prolonged activated partial thromboplastin time in patients.



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.