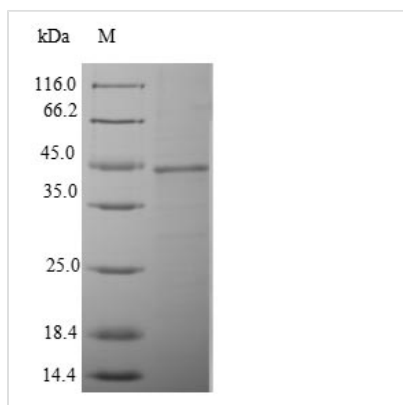


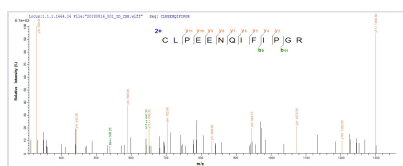


Recombinant Mouse Enteropeptidase (Tmprss15), partial

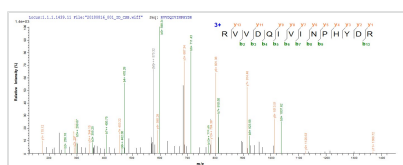
Product Code	CSB-EP018824MO
Relevance	Responsible for initiating activation of pancreatic proteolytic proenzymes (trypsin, chymotrypsin and carboxypeptidase A). It catalyzes the conversion of trypsinogen to trypsin which in turn activates other proenzymes including chymotrypsinogen, procarboxypeptidases, and proelastases
Abbreviation	Recombinant Mouse Tmprss15 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.	P97435
Alias	Enterokinase Serine protease 7 Transmembrane protease serine 15 Cleaved into the following 2 chains: Enteropeptidase non-catalytic heavy chain Enteropeptidase catalytic light chain
Product Type	Recombinant Protein
Immunogen Species	Mus musculus (Mouse)
Purity	Greater than 90% as determined by SDS-PAGE.
Sequence	IVGGSDAQAGAWPWVVALYHRDRSTDRLLCGASLVSSDWLVSAAHCVYRRN LDPTRWTAVLGLHMQSNLTSPQVVRVVDQIVINPHYDRRRKVNDIAMMHLEF KVNYTDYIQPICLPEENQIFIPGRTCSIAGWGYDKINAGSTVDVLKEADVPLISN EKCQQQLPEYNITESMICAGYEEGGIDSCQGDSGGPLMCQENNRWFLVGVTS FGVQCALPNHPGVYVRVSQFIEWIHSFLH
Research Area	Cell Biology
Source	E.coli
Target Names	Tmprss15
Expression Region	830-1069aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 6xHis-SUMO-tagged
Mol. Weight	43.0kDa
Protein Length	Partial
Image	



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



Based on the SEQUEST from database of E.coli host and target protein, the LC-MS/MS Analysis result of CSB-EP018824MO could indicate that this peptide derived from E.coli-expressed Mus musculus (Mouse) Tmprss15.



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Description

The recombinant mouse Tmprss15 protein is a fusion protein consists of the mouse Tmprss15 protein (830-1069aa) partnered with the N-terminal 6xHis-SUMO tag. It was produced in the E.coli. This recombinant Tmprss15 protein's purity is greater than 90% determined by SDS-PAGE. After electrophoresis, there is a 44 kDa protein band presented on the gel.

TMPRSS15 have been previously implicated in neuronal function. Besides, novel compound heterozygous TMPRSS15 gene variants could cause enterokinase deficiency. Recently, TMPRSS15 shares high homology in the serine protease domains of TMPRSS2, thus, may participate in the cleavage of the S protein of SARS-CoV-2 during infection. Loss-of-function variants in the TMPRSS15 gene are responsible for EKD. The lack of enterokinase (EK) prevents the activation of trypsinogen, which leads to a disorder of intestinal protein absorption. To date, according to the Human Genome Mutation Database (HGMD), only four variants have been described in the TMPRSS15 gene. The TMPRSS15 gene encodes an enzyme that converts the pancreatic proenzyme trypsinogen to trypsin, which in turn activates other proenzymes, including chymotrypsinogen and procarboxypeptidases. Mutations in TMPRSS15 cause enterokinase deficiency, a malabsorption disorder characterized by diarrhea and failure to thrive.

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.