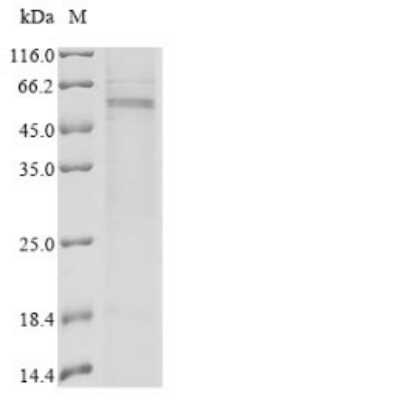
Recombinant Human Transmembrane protease serine 2 (TMPRSS2), partial

Product Code	CSB-MP023924HU
Relevance	Plasma membrane-anchored serine protease that participates in proteolytic cascades of relevance for the normal physiologic function of the prostate (PubMed:25122198). Androgen-induced TMPRSS2 activates several substrates that include pro-hepatocyte growth factor/HGF, the protease activated receptor-2/F2RL1 or matriptase/ST14 leading to extracellular matrix disruption and metastasis of prostate cancer cells (PubMed:15537383, PubMed:26018085, PubMed:25122198). In addition, activates trigeminal neurons and contribute to both spontaneous pain and mechanical allodynia
Abbreviation	Recombinant Human TMPRSS2 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.	O15393
Form	Liquid or Lyophilized powder
Storage Buffer	Lyophilized from Tris/PBS-based buffer, 6% Trehalose
Alias	(Serine protease 10) (PRSS10)
Product Type	Recombinant Protein
Immunogen Species	Homo sapiens (Human)
Purity	Greater than 85% as determined by SDS-PAGE.
Sequence	WKFMGSKCSNSGIECDSSGTCINPSNWCDGVSHCPGGEDENRCVRLYGPNF ILQVYSSQRKSWHPVCQDDWNENYGRAACRDMGYKNNFYSSQGIVDDSGST SFMKLNTSAGNVDIYKKLYHSDACSSKAVVSLRCIACGVNLNSSRQSRIVGGE SALPGAWPWQVSLHVQNVHVCGGSIITPEWIVTAAHCVEKPLNNPWHWTAFA GILRQSFMFYGAGYQVEKVISHPNYDSKTKNNDIALMKLQKPLTFNDLVKPVCL PNPGMMLQPEQLCWISGWGATEEKGKTSEVLNAAKVLLIETQRCNSRYVYDN LITPAMICAGFLQGNVDSCQGDSGGPLVTSKNNIWWLIGDTSWGSGCAKAYR PGVYGNVMVFTDWIYRQMRADG
Source	Mammalian cell
Target Names	TMPRSS2
Protein Names	Transmembrane protease serine 2
Expression Region	106-492 aa
Notes	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
Tag Info	N-terminal 10xHis-tagged and C-terminal Myc-tagged

Mol. Weight	47.8 kDa
Protein Length	Partial

Image



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

Description

The gene fragment encoding amino acids 106-492 of the human TMPRSS2 is expressed in mammalian cells. The resulting protein is fused with the 10xHis-tag at the N-terminus and with the Myc-tag at the C-terminus, ultimately leading to the production of the recombinant human TMPRSS2 protein. Its purity is greater than 85% measured by SDS-PAGE. On the gel, it migrated to the molecular weight band of about 50 kDa. This recombinant human TMPRSS2 protein is available now. The target protein TMPRSS2 is a serine protease responsible for the priming of SARS-CoV-2 S protein and promoting viral entry. It also plays a role in the occurrence of prostate malignancies.

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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