

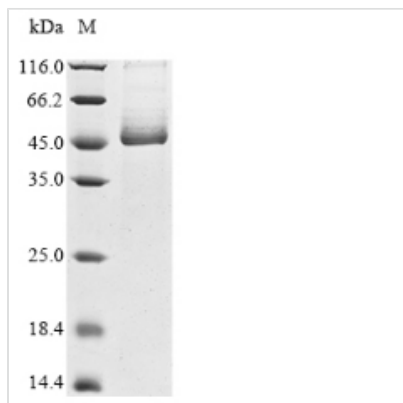


# Recombinant Human Transmembrane protease serine 2 (TMPRSS2), partial (Active)

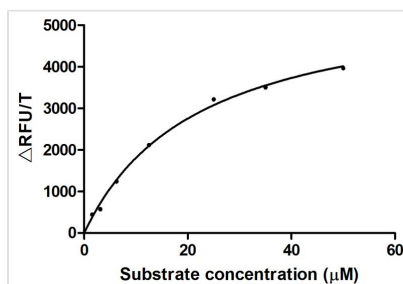
<b>Product Code</b>	CSB-YP023924HU
<b>Relevance</b>	Plasma membrane-anchored serine protease that participates in proteolytic cascades of relevance for the normal physiologic function of the prostate (PubMed:25122198). Androgen-induced TMPRSS2 activates several substrates that include pro-hepatocyte 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
<b>Abbreviation</b>	Recombinant Human TMPRSS2 protein, partial (Active)
<b>Storage</b>	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.
<b>Uniprot No.</b>	O15393
<b>Form</b>	Liquid or Lyophilized powder
<b>Product Type</b>	Recombinant Proteins
<b>Immunogen Species</b>	Homo sapiens (Human)
<b>Biological Activity</b>	①Recombinant Human TMPRSS2 His tag protein (CSB-YP023924HU) enzyme activity is measured by its ability to cleave fluorogenic peptide substrate(Boc-Gln-Ala-Arg-AMC), The Km is 21.93μM. ②Measured by Camostat Mesylate inhibit ratio on TMPRSS2 (CSB-YP023924HU), which can cleave fluorogenic peptide substrate (Boc-Gln-Ala-Arg-AMC). The Camostat Mesylate inhibit EC50 is 0.03347-0.07945μM.
<b>Purity</b>	Greater than 85% as determined by SDS-PAGE.
<b>Sequence</b>	WKFMGSKCSNSGIECDSSGTCINPSNWCDGVSHCPGGEDENRCVRLYGPNF ILQVYSSQRKSWHPVCQDDWNENYGRAACRDMGYKNNFYSSQGIVDDSGST SFMKLNTSAGNVDIYKKLYHSDACSSKAVVSLRCIACGVNLN SSRQSRIVGGE SALPGAWPWQVSLHVQNVHVC GGSII TPEWIVTAAHCVEKPLNNPWHWTAF GILRQSFMFY GAGYQVEKVISHPNYDSKTKNNDIALMKLQKPLTFNDLVKPVCL PNPGMMLQPEQLCWISGWGATEEKGKTSEVLNAAKVLLIETQRCNSRYVYDN LITPAMICAGFLQGNVDSCQGD SGGPLVTSKNNIWWLIGDTSWGSGCAKAYR PGVYGNVMVFTDWIYRQMRADG
<b>Research Area</b>	Cancer
<b>Source</b>	Yeast
<b>Target Names</b>	TMPRSS2
<b>Protein Names</b>	Transmembrane protease serine 2



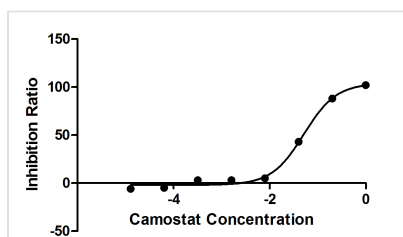
<b>Expression Region</b>	106-492 aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal 6xHis-tagged
<b>Mol. Weight</b>	44.8kDa
<b>Protein Length</b>	Partial

**Image**


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



Recombinant Human TMPRSS2 His tag protein (CSB-YP023924HU) enzyme activity is measured by its ability to cleave fluorogenic peptide substrate(Boc-Gln-Ala-Arg-AMC), The  $K_m$  is 21.93μM.



Activity Measured by Camostat Mesylate inhibit ratio on TMPRSS2 (CSB-YP023924HU), which can cleave fluorogenic peptide substrate (Boc-Gln-Ala-Arg-AMC). The Camostat Mesylate inhibit  $EC_{50}$  is 0.03347-0.07945μM.

**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.