

Active Recombinant Human TMPRSS2 Protein, His-tagged

Cat. No. TMPRSS2-02H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Rcombinant Human TMPRSS2 [106-492 aa(R255Q)] Protein with a N-terminal 10xHis-tag was expressed in mammalian cell.
Species	Human
Source	Mammalian Cells
ProteinLength	106-492
Description	This gene encodes a secreted ligand of the glial cell line-derived neurotrophic factor (GDNF) subfamily and TGF-beta (transforming growth factor-beta) superfamily of proteins. Ligands of this family bind various TGF-beta receptors leading to recruitment and activation of SMAD family transcription factors that regulate gene expression. The encoded preproprotein is proteolytically processed to generate each subunit of the disulfide-linked homodimer. This protein signals through the RET receptor and GFR alpha 3 coreceptor, and supports the survival of a number of peripheral neuron populations and at least one population of dopaminergic CNS neurons. Mice lacking a functional copy of this gene exhibit ptosis and impaired development of the sympathetic nervous system.
Form	Lyophilized powder
Bio-activity	Recombinant Human TMPRSS2 His tag protein enzyme activity is measured by its ability to cleave fluorogenic peptide substrate(Boc-Gln-Ala-Arg-AMC), The Km is 19.16μM.

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Molecular Mass	47.8 kDa
AA Sequence	WKFMGSKCSNSGIECDSSGTCINPSNWCDGVSHCPGGEDENRCVRLYGPNFILQV YSSQRKSWHPVCQDDWNENYGRAACRDMGYKNNFYSSQGIVDDSGSTSFMKLNT SAGNVDIYKKLYHSDACSSKAVVSLRCIACGVNLNSSRQSQIVGGESALPGAWPWQ VSLHVQNVHVCGGSITPEWIVTAAHCVEKPLNNPWHWTAFAFILRQSFMFYGAGY QVEKVISHPNYDSKTKNNDIALMKLQKPLTFNDLVKPVCLPNPGMMLQPEQLCWISG WGATEEKGKTSEVLNAAKVLLIETQRCNSRYVYDNLITPAMICAGFLQGNVDSCQGD SGGPLVTSKNNIWWLIGDTSWGSGCAKAYRPGVYGNVMVFTDWIYRQMRADG
Endotoxin	<1.0 EU/μg of the protein by the LAL method.
Purity	≥85% by SDS-PAGE quantitative densitometry by Coomassie Blue Staining
Stability	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/-80 centigrade. The shelf life of lyophilized form is 12 months at -20/-80 centigrade.
Storage	Short term: 2 to 8 centigrade, one week after reconstitution Long term: -20 to -80 centigrade, twelve months from the date of receipt
Storage Buffer	Lyophilized from a 0.2 μm sterile filtered 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0. The volume before lyophilization is 20μL/vial.
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/-80 centigrade. Our default

final concentration of glycerol is 50%. Customers could use it as reference.

GENE INFORMATION

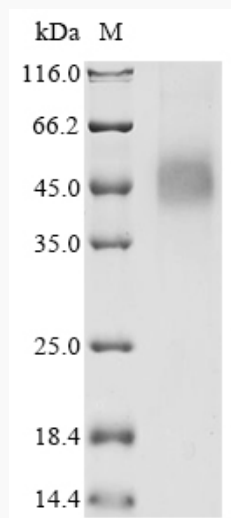
Gene Name	TMPRSS2 transmembrane serine protease 2 [Homo sapiens (human)]
Official Symbol	TMPRSS2
Synonyms	TMPRSS2; transmembrane serine protease 2; PRSS10; transmembrane protease serine 2; epitheliasin; serine protease 10; transmembrane protease, serine 2; EC 3.4.21.-
Gene ID	7113
mRNA Refseq	NM_005656
Protein Refseq	NP_005647
MIM	602060
UniProt ID	O15393

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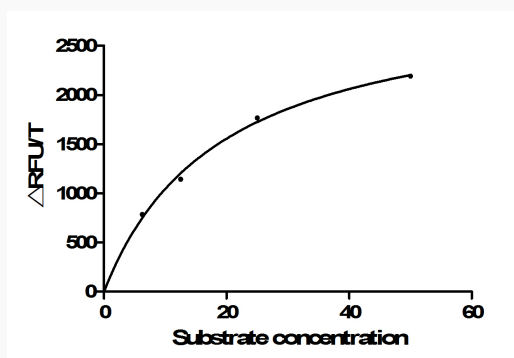
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SDS-PAGE



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



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