

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	<p>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.</p>
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	<p>WKFMGSKCSNSGIECDSSGTCINPSNWCDGVSHCPGGEDENRCVRLYGPNFILQV YSSQRKSWHPVCQDDWNENYGRAACRDMGYKNNFYSSQGIVDDSGSTSFMKLNT SAGNVDIYKKLYHSDACSSKAVVSLRCIACGVNLNSSRQSQIVGGESALPGAWPWQ VSLHVQNVHVCGGSITPEWIVTAAHCVEKPLNNPWHWTAFAGILRQSFMYGAGY QVEKVISHPNYDSKTKNNDIALMKLQKPLTFNDLVKPVCLPNPGMMLQPEQLCWISG WGATEEKGKTSEVLNAAKVLLIETQRCNSRYVYDNLITPAMICAGFLQGNVDSCQGD SGGPLVTSKNNIWWLIGDTSWGSGCAKAYRPGVYGNVMVFTDWIYRQMRADG</p>
Endotoxin	<1.0 EU/μg of the protein by the LAL method.
Purity	≥85% by SDS-PAGE quantitative densitometry by Coomassie Blue Staining
Stability	<p>The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.</p> <p>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.</p>
Storage	<p>Short term: 2 to 8 centigrade, one week after reconstitution</p> <p>Long term: -20 to -80 centigrade, twelve months from the date of receipt</p>
Storage Buffer	<p>Lyophilized from a 0.2 μm sterile filtered 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0.</p> <p>The volume before lyophilization is 20μL/vial.</p>
Reconstitution	<p>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</p>

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

GENE INFORMATION

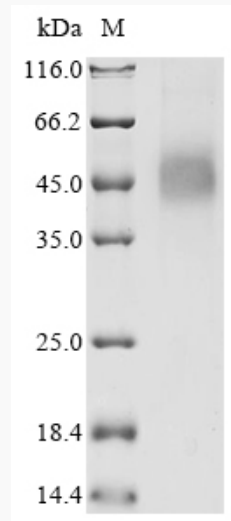
Gene Name	TMPRSS2 transmembrane serine protease 2 [Homo sapiens (human)]
Official Symbol	TMPRSS2
Synonyms	TMPRSS2; transmembrane serine protease 2; PRSS10; transmembrane protease serine 2; epitheliasin; serine protease 10; transmembrane protease, serine 2; EC 3.4.21.-
Gene ID	7113
mRNA Refseq	NM_005656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

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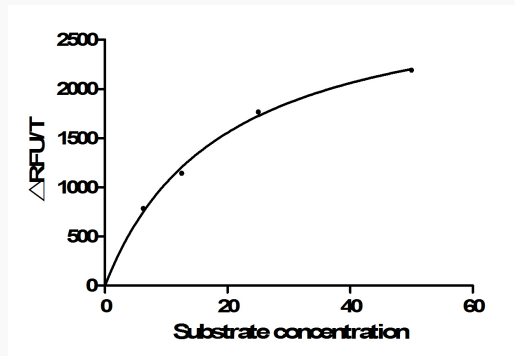
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SDS-PAGE



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



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