

Product datasheet for **RC228432**

TMPRSS2 (NM_001135099) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	TMPRSS2 (NM_001135099) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	TMPRSS2
Synonyms:	PRSS10
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>RC228432 representing NM_001135099
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGCCCCCTGCCCGCCCGGAGGTGAAAGCGGGTGTGAGGAGCGGGCGGGCAGGTCATATTGAACATT
 CCAGATACCTATCATTACTCGATGCTGTTGATAACAGCAAGATGGCTTTGAACTCAGGGTACCACCAGC
 TATTGGACCTTACTATGAAAACCATGGATACCAACCGGAAAAACCCCTATCCCGCAGACCCACTGTGGTC
 CCCACTGTCTACGAGGTGCATCCGGCTCAGTACTACCCGTCCCCGTGCCCGAGTACGCCCGAGGGTCC
 TGACGCAGGCTTCCAACCCCGTCTGTCACGCAGCCAAATCCCATCCGGGACAGTGTGCACCTCAA
 GACTAAGAAAGCACTGTGCATCACCTTGACCCTGGGGACCTTCTCGTGGGAGCTGCGTGGCCGCTGGC
 CTACTCTGGAAGTTCATGGGCAGCAAGTCTCAACTCTGGGATAGAGTGCAGTCTCAGGTACCTGCA
 TCAACCCCTCAACTGGTGTGATGGCGTGCACACTGCCCGGGGGAGGACGAGAATCGGTGTGTTCCG
 CCTCTACGGACCAAACCTCATCCTTCAGGTGTACTCATCTCAGAGGAAGTCTGGCACCCCTGTGTCCAA
 GACGACTGGAACGAGAATACGGGCGGGCGGCCTGCAGGGACATGGGCTATAAGAATAATTTTACTCTA
 GCCAAGGAATAGTGGATGACAGCGGATCCACCAGCTTTATGAAACTGAACACAAGTGCCGGCAATGTGCA
 TATCTATAAAAACTGTACCACAGTGTGCCTGTTCTTCAAAGCAGTGGTTTCTTACGCTGTATAGCC
 TGCGGGGTCAACTTGAATCAAGCCGCCAGAGCAGGATTGTGGGCGGCGAGAGCGCGCTCCCGGGGGCT
 GGCCCTGGCAGGTGACCTGCACGTCCAGAACGTCCACGTGTGCGGAGGCTCCATCATCACCCCGAGTG
 GATCGTGACAGCCGCCACTGCGTGGAAAACTCTTAACAATCCATGGCATTGGACGGCATTTCGGGGG
 ATTTTGAGACAATCTTTCATGTTCTATGGAGCCGGATACCAAGTAGAAAAAGTATTCTCATCAAATT
 ATGACTCCAAGCAAGAACAATGACATTGCGCTGATGAAGTGCAGAAGCCTGACTTCAACGACT
 AGTGAAACCAAGTGTGCTGCCCAACCCAGGCATGATGCTGCAGCCAGAACAGCTCTGCTGGATTTCCGGG
 TGGGGGGCCACCGAGGAGAAAGGAAGACCTCAGAAGTGTGAACGCTGCCAAGGTGCTTCTCATTGAGA
 CACAGAGATGCAACAGCAGATATGTCTATGACAACCTGATCACACCAGCCATGATCTGTGCCGGTCTCT
 GCAGGGGAACGTCGATTCTTCCAGGGTGCAGTGGAGGGCTCTGGTCACTTCGAAGAACAATATCTGG
 TGGCTGATAGGGGATACAAGCTGGGTTCTGGCTGTGCCAAAGCTTACAGACCAGGAGTGTACGGGAATG
 TGATGGTATTACGGACTGGATTTATCGACAAATGAGGGCAGACGGC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC228432 representing NM_001135099
 Red=Cloning site Green=Tags(s)

MPPAPPGGESGCEERGAAGHIEHSRYLSLLDAVDNSKMALNSGSPPAIGPYENHGYQPENPYPAQPTVV
 PTVYEVHPAQYYPSPVPQYAPRVLTAQSNPVVCTQPKSPSGTVCTSKTKKALCITLTLGTFVLVGAALAAG
 LLWKFMSGKCSNSGIECDSSGTCINPSNWC DGVSHCPGGEENRCVRLYGPNFILQVYSSQRKSWHPVCQ
 DDWNEYGRAACRDMGYKNFYSSQGI VDDSGSTSFMKLNTSAGNVDIYKLYHSDACSSKAVVSLR CIA
 CGVNLNSSRQSRIVGGESALPGAWPQVSLHVQNVHVC GGSIIITPEWIVTAAHCVEKPLNPNPWHWTAFA G
 ILRQSFMYGAGYQVEKVISHPNYDSKTKNNDIALMKLQKPLTFNDLVKPVCLPNPMMMLQPEQLCWISG
 WGATEEKGKTSEVLNAKVLLIETQRCNSRYVDNLITPAMICAGFLQGNV DSCQGDSSGGLVTSKNNIW
 WLIGDTSWGS GCAKAYRPGVYGNVMVFTDWIYRQMRADG

TRTRPLEQKLI SEEDLAANDILDYKDDDDKV

Chromatograms:

https://cdn.origene.com/chromatograms/mk8065_f08.zip

Restriction Sites:

Sgfl-MluI

Cloning Scheme:


ACCN: NM_001135099

ORF Size: 1587 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

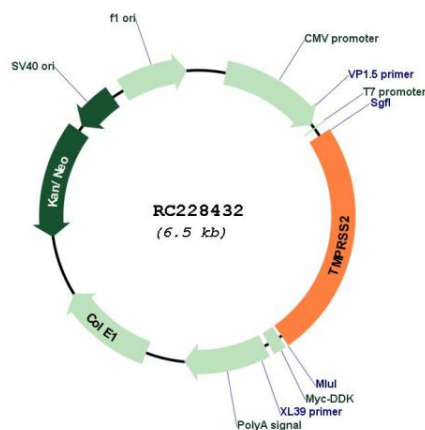
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

- Reconstitution Method:**
1. Centrifuge at 5,000xg for 5min.
 2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
 3. Close the tube and incubate for 10 minutes at room temperature.
 4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
 5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

Note:	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
RefSeq:	<u>NM_001135099.1, NP_001128571.1</u>
RefSeq ORF:	1590 bp
Locus ID:	7113
UniProt ID:	<u>O15393</u>
Cytogenetics:	21q22.3
Protein Families:	Druggable Genome, Protease, Secreted Protein, Transmembrane
MW:	57.5 kDa
Gene Summary:	This gene encodes a protein that belongs to the serine protease family. The encoded protein contains a type II transmembrane domain, a receptor class A domain, a scavenger receptor cysteine-rich domain and a protease domain. Serine proteases are known to be involved in many physiological and pathological processes. This gene was demonstrated to be up-regulated by androgenic hormones in prostate cancer cells and down-regulated in androgen-independent prostate cancer tissue. The protease domain of this protein is thought to be cleaved and secreted into cell media after autocleavage. This protein also facilitates entry of viruses into host cells by proteolytically cleaving and activating viral envelope glycoproteins. Viruses found to use this protein for cell entry include Influenza virus and the human coronaviruses HCoV-229E, MERS-CoV, SARS-CoV and SARS-CoV-2 (COVID-19 virus). Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Apr 2020]

Product images:



Circular map for RC228432