

## Product datasheet for **SC116619**

### **TMPRSS2 (NM\_005656) Human Untagged Clone**

#### **Product data:**

Product Type:	Expression Plasmids
Product Name:	TMPRSS2 (NM_005656) Human Untagged Clone
Tag:	Tag Free
Symbol:	TMPRSS2
Synonyms:	PRSS10
Mammalian Cell Selection:	None
Vector:	<u><a href="#">pCMV6-XL4</a></u>
E. coli Selection:	Ampicillin (100 ug/mL)



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**Fully Sequenced ORF:** >OriGene ORF within SC116619 sequence for NM\_005656 edited (data generated by NextGen Sequencing)

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ATGGCTTTGAACTCAGGGTCACCACCAGCTATTGGACCTACTATGAAAACCATGGATAC
CAACCGGAAAACCCCTATCCCGCACAGCCCACTGTGGTCCCCACTGTCTACGAGGTGCAT
CCGGCTCAGTACTACCCGTCCCCGTGCCCCAGTACGCCCCGAGGGTCTGACGCAGGCT
TCCAACCCCGTCGTCTGCACGCAGCCAAATCCCCATCCGGGACAGTGTGCACCTCAAAG
ACTAAGAAAGCACTGTGCATCACCTTGACCTGGGGACCTTCTCGTGGGAGCTGGCGTG
GCCGTGGCCTACTCTGGAAGTTTCATGGGCAGCAAGTGCTCCAACCTCTGGGATAGAGTGC
GACTCCTCAGGTACCTGCATCAACCCCTCTAACTGGTGTGATGGCGTGTCACTGCCCC
GGCGGGGAGGACGAGAATCGGTGTGTTGCGCTCTACGGACCAAACCTTCATCCTTCAGRTG
TACTCATCTCAGAGGAAGTCTGGCACCCTGTGTGCCAAGACGACTGGAACGAGAACTAC
GGGCGGGCGGCCTGCAGGGACATGGGCTATAAGAATAATTTTTACTCTAGCCAAGGAATA
GTGGATGACAGCGGATCCACCAGCTTTATGAACTGAACACAAGTGCCGGCAATGTCGAT
ATCTATAAAAACTGTACCACAGTGTGCCTGTTCTTCAAAGCAGTGGTTTCTTACGC
TGTATAGCTGCGGGTCAACTGAACTCAAGCCGCCAGAGCAGGATTGTGGCGGYGAG
AGCGCGCTCCCGGGGCCTGGCCCTGGCAGGTCAGCCTGCACGTCCAGAACGTCCACGTG
TGGGAGGCTCCATCATACCCCGAGTGGATCGTGACAGCCGCCCACTGCGTGGAAAAA
CCTCTTAAACAATCCATGGCATTGGACGGCATTGCGGGGATTTTGGAGACAATCTTTCATG
TTCTATGGAGCCGGATACCAAGTAGAAAAAGTGATTTCTCATCAAATATGACTCCAAG
ACCAAGAAACAATGACATTGCGCTGATGAAGCTGCAGAAGCCTCTGACTTCAACGACCTA
GTGAAACCAAGTGTGTCTGCCAACCCAGGCATGATGCTGCAGCCAGAACAGCTCTGCTGG
ATTTCCGGTGGGGGCCACCGAGGAGAAAGGGAAGACCTCAGAAGTGTGAACGCTGCC
AAGGTGCTTCTCATTGAGACACAGAGATGCAACAGCAGATATGTCTATGACAACCTGATC
ACACCAGCCATGATCTGTGCCGGCTTCTGCAGGGGAACGTGATTTCTTGGCAGGGTGAC
AGTGGAGGCCTCTGGTCACTTCAAGAACAATATCTGGTGGCTGATAGGGGATACAAGC
TGGGGTTCTGGCTGTGCCAAAGCTTACAGACCAGGAGTGTACGGGAATGTGATGGTATTC
ACGGACTGGATTTATCGACAAATGAGGGCAGACGGCTAA
    
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Clone variation with respect to NM\_005656.3  
478 g=>r;777 c=>y

**5' Read Nucleotide Sequence:**

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>OriGene 5' read for NM_005656 unedited
NCCTGGATCTTGTGTGGGAGTCAGTGTCTACAAGCCTAACTTTTTTTCGCGTTGGCTTGGT
TGTTTTGAAAAGTCATATTGAACATTCCAGATACCTATCATTACTCGATGCTGTTGATAAC
AGCAAGATGGCTTTGAACTCAGGGTCACCACCAGCTATTGGATCGATTATGAAAACATGG
ATACCATCCGGAAAACCTCTATCCCGCACAGCCCACTGTGGTCCCCACTGTCTACGAGGT
GCATCCGGTTCAGTACTACCCGTCCCCGTGCCCCAGTACGCCCCGAGGGTCTGACGCA
GGCTTCCAACCCCGTCGTCTGCACGCAGCCAAATCCCCATCCGGGACAGTGTGCACCTC
AAAGACTAAGAAAAGCACTGTGCATCACCTTGACCCTGGGGACCTTCTCGTGGGAGCTGC
GCTGGCCGCTGGCCTACTCTGGAAGTTCATGGGCAGCAAGTGTCCAACCTCTGGGATAGA
GTGCGACTCCTCAGGTACCTGCATCAACCCCTCTAACTGGTGTGATGGCGTGTCACTG
CCCCGGCGGGGAGGACGAGAATCGGTGTGTTGCGCTCTACGGACCAAACCTTCATCCTTCA
GGTGTACTCATCTCAGAGGAAGTCTGGCACCTGTGTGCCAAGACGACTGGGAACGAGA
ACTACGGGCGGGCGCCTGCAAGGACATGGGCTATAAGAATAATTTTTACTCTAGCCAG
GAATATTGGATGACAGCGGATCCACCAGCTTTATGAACTGAACACAATTGTCCGGCAAT
GTCGATATCTTATAAACACTGTCCACAATGATGCCTGTTCTTCAAAGT
    
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<b>3' Read Nucleotide Sequence:</b>	<p>&gt;OriGene 3' read for NM_005656 unedited</p> <pre>CTCTGGACCGCGGCCGCAATCTAGGATCGAGTTTTTTTTTTTTTTTTTTTACTTTGAAA AAAAAACGCATAATTTATTTGCATGATATTCATTTTACAAATGAACTTTACAGTTTAAA AAAGATACAAAAAAGACAAACAGTTGTTTACATAAATAAGAAGGGGCAATAAAGAAGGA AGACGTTTTACCATTACAACACCTTTTAGGATGTGTCTTGGGGAGCAAGCACCTTACAG TGCCAACGTGTTTCCAAGGTCCCTGGGAATGCTGCTCTACAGAGGCATGTGCACAGACG GATCCTGCAAATGGGATTGCAAGACTTTCCATTTCAAGGTTAAGTCCTAGCTGTAGAATC ATTCATTTTCATTCTTGCAAACCAGCCTTGCTTGGCCAGGAGGCAGAACCATTGGTAGAGTAG TGCTCATGGTTATGGCACTTGGCAATGCAAAAGGGACCCTTCCCCTGGTTGGAAACCCAC AGCATTGGAAGGGACCACAGAGAGTCCAAAAACAAACACATCTTCTCTTCTTCGCCGCC ACCATGGGCACCTTGCTTACGACATTCATTTATAGAAGTAAAGTCAGGAGCCAGTCAT TTTGTCAAAGCAGCTGAAATAGGCCACCACTTACTTGGCAAAGATGATACAGTTTCAA AGAGTTAAATGAAGGTGGACTACTTGGAGACATCAAAGCTAAGTTTCCAGGAGCACTGA GGTAGNCATGTGTAGAAACATAACATGGAAACAGTGTACCTTAACTGAGCATCCTTGAT TTNCCCCATGGACCCCTCATTTTCACTGACTAGCAGGCCTGAAGAGCAACATGGTGCCAG ACTTNGCCGCTGCCAGGACAGGNGCATGGCACTTNCAGGTGCTAGACAGGTCAGGNNNA GATGAGAGAANGCTGATTCTCCTCCAGNAGCCCCACCATGTGCAGTGAAACTGCCANGA TGCTAGGCAGTCCTTTCATGCTTCTCGACAGGACTGT</pre>
<b>Restriction Sites:</b>	ECoRI-NOT
<b>ACCN:</b>	NM_005656
<b>Insert Size:</b>	3270 bp
<b>OTI Disclaimer:</b>	<p>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 <a href="mailto:custsupport@origene.com">custsupport@origene.com</a> or by calling 301.340.3188 option 3 for pricing and delivery.</p> <p>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. <a href="#">More info</a></p>
<b>Components:</b>	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).
<b>Reconstitution Method:</b>	<ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol>

<b>Note:</b>	Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.
<b>RefSeq:</b>	<a href="#">NM_005656.2</a> , <a href="#">NP_005647.2</a>
<b>RefSeq Size:</b>	3226 bp
<b>RefSeq ORF:</b>	1479 bp
<b>Locus ID:</b>	7113
<b>UniProt ID:</b>	<a href="#">O15393</a>
<b>Cytogenetics:</b>	21q22.3
<b>Domains:</b>	SR, Tryp_SPc, ldl_recept_a
<b>Protein Families:</b>	Druggable Genome, Protease, Secreted Protein, Transmembrane
<b>Gene Summary:</b>	<p>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]</p> <p>Transcript Variant: This variant (2) has an alternate 5' exon and uses a downstream AUG start codon, as compared to variant 1. The resulting isoform (2) has a shorter N-terminus, as compared to isoform 1.</p>