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Product datasheet for SC323858

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:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)

Fully Sequenced ORF:

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>OriGene sequence for NM_005656.2
GGCGGAGGCGGAGGGCGAGGGGCGGGGAGCGCCGCCTGGAGCGCGGCAGGTCATATTGAA
CATTCCAGATACCTATCATTACTCGATGCTGTTGATAACAGCAAGATGGCTTTGAACTCA
GGGTCACCACCAGCTATTGGACCTTACTATGAAAACCATGGATACCAACCGGAAAACCCC
TATCCCGCACAGCCCACTGTGGTCCCCACTGTCTACGAGGTGCATCCGGCTCAGTACTAC
CCGTCCCCCGTGCCCCAGTACGCCCCGAGGGTCCTGACGCAGGCTTCCAACCCCGTCGTC
TGCACGCAGCCCAAATCCCCATCCGGGACAGTGTGCACCTCAAAGACTAAGAAAGCACTG
TGCATCACCTTGACCCTGGGGACCTTCCTCGTGGGAGCTGCGCTGGCCGCTGGCCTACTC
TGGAAGTTCATGGGCAGCAAGTGCTCCAACTCTGGGATAGAGTGCGACTCCTCAGGTACC
TGCATCAACCCCTCTAACTGGTGTGATGGCGTGTCACACTGCCCCGGCGGGGAGGACGAG
AATCGGTGTGTTCGCCTCTACGGACCAAACTTCATCCTTCAGGTGTACTCATCTCAGAGG
AAGTCCTGGCACCCTGTGTGCCAAGACGACTGGAACGAGAACTACGGGCGGGCGGCCTGC
AGGGACATGGGCTATAAGAATAATTTTTACTCTAGCCAAGGAATAGTGGATGACAGCGGA
TCCACCAGCTTTATGAAACTGAACACAAGTGCCGGCAATGTCGATATCTATAAAAAACTG
TACCACAGTGATGCCTGTTCTTCAAAAGCAGTGGTTTCTTTACGCTGTATAGCCTGCGGG
GTCAACTTGAACTCAAGCCGCCAGAGCAGGATCGTGGGCGGCGAGAGCGCGCTCCCGGGG
GCCTGGCCCTGGCAGGTCAGCCTGCACGTCCAGAACGTCCACGTGTGCGGAGGCTCCATC
ATCACCCCCGAGTGGATCGTGACAGCCGCCCACTGCGTGGAAAAACCTCTTAACAATCCA
TGGCATTGGACGGCATTTGCGGGGATTTTGAGACAATCTTTCATGTTCTATGGAGCCGGA
TACCAAGTAGAAAAAGTGATTTCTCATCCAAATTATGACTCCAAGACCAAGAACAATGAC
ATTGCGCTGATGAAGCTGCAGAAGCCTCTGACTTTCAACGACCTAGTGAAACCAGTGTGT
CTGCCCAACCCAGGCATGATGCTGCAGCCAGAACAGCTCTGCTGGATTTCCGGGTGGGGG
GCCACCGAGGAGAAAGGGAAGACCTCAGAAGTGCTGAACGCTGCCAAGGTGCTTCTCATT
GAGACACAGAGATGCAACAGCAGATATGTCTATGACAACCTGATCACACCAGCCATGATC
TGTGCCGGCTTCCTGCAGGGGAACGTCGATTCTTGCCAGGGTGACAGTGGAGGGCCTCTG
GTCACTTCGAAGAACAATATCTGGTGGCTGATAGGGGATACAAGCTGGGGTTCTGGCTGT
GCCAAAGCTTACAGACCAGGAGTGTACGGGAATGTGATGGTATTCACGGACTGGATTTAT
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CGACAAATGAGGGCAGACGGCTAATCCACATGGTCTTCGTCCTTGACGTCGTTTTACAAG
AAAACAATGGGGCTGGTTTTGCTTCCCCGTGCATGATTTACTCTTAGAGATGATTCAGAG
GTCACTTCATTTTTATTAAACAGTGAACTTGTCTGGCTTTGGCACTCTCTGCCATTCTGT
GCAGGCTGCAGTGGCTCCCCTGCCCAGCCTGCTCTCCCTAACCCCTTGTCCGCAAGGGGT
GATGGCCGGCTGGTTGTGGGCACTGGCGGTCAAGTGTGGAGGAGAGGGGTGGAGGCTGCC
CCATTGAGATCTTCCTGCTGAGTCCTTTCCAGGGGCCAATTTTGGATGAGCATGGAGCTG
TCACCTCTCAGCTGCTGGATGACTTGAGATGAAAAAGGAGAGACATGGAAAGGGAGACAG
CCAGGTGGCACCTGCAGCGGCTGCCCTCTGGGGCCACTTGGTAGTGTCCCCAGCCTACCT
CTCCACAAGGGGATTTTGCTGATGGGTTCTTAGAGCCTTAGCAGCCCTGGATGGTGGCCA
GAAATAAAGGGACCAGCCCTTCATGGGTGGTGACGTGGTAGTCACTTGTAAGGGGAACAG
AAACATTTTTGTTCTTATGGGGTGAGAATATAGACAGTGCCCTTGGTGCGAGGGAAGCAA
TTGAAAAGGAACTTGCCCTGAGCACTCCTGGTGCAGGTCTCCACCTGCACATTGGGTGGG
GCTCCTGGGAGGGAGACTCAGCCTTCCTCCTCATCCTCCCTGACCCTGCTCCTAGCACCC
TGGAGAGTGCACATGCCCCTTGGTCCTGGCAGGGCGCCAAGTCTGGCACCATGTTGGCCT
CTTCAGGCCTGCTAGTCACTGGAAATTGAGGTCCATGGGGGAAATCAAGGATGCTCAGTT
TAAGGTACACTGTTTCCATGTTATGTTTCTACACATTGCTACCTCAGTGCTCCTGGAAAC
TTAGCTTTTGATGTCTCCAAGTAGTCCACCTTCATTTAACTCTTTGAAACTGTATCATCT
TTGCCAAGTAAGAGTGGTGGCCTATTTCAGCTGCTTTGACAAAATGACTGGCTCCTGACT
TAACGTTCTATAAATGAATGTGCTGAAGCAAAGTGCCCATGGTGGCGGCGAAGAAGAGAA
AGATGTGTTTTGTTTTGGACTCTCTGTGGTCCCTTCCAATGCTGTGGGTTTCCAACCAGG
GGAAGGGTCCCTTTTGCATTGCCAAGTGCCATAACCATGAGCACTACTCTACCATGGTTC
TGCCTCCTGGCCAAGCAGGCTGGTTTGCAAGAATGAAATGAATGATTCTACAGCTAGGAC
TTAACCTTGAAATGGAAAGTCTTGCAATCCCATTTGCAGGATCCGTCTGTGCACATGCCT
CTGTAGAGAGCAGCATTCCCAGGGACCTTGGAAACAGTTGGCACTGTAAGGTGCTTGCTC
CCCAAGACACATCCTAAAAGGTGTTGTAATGGTGAAAACGTCTTCCTTCTTTATTGCCCC
TTCTTATTTATGTGAACAACTGTTTGTCTTTTTTTGTATCTTTTTTAAACTGTAAAGTTC
AATTGTGAAAATGAATATCATGCAAATAAATTATGCGATTTTTTTTTCAAAGTAAAAAAA
AAAAAAAAAAAAAAA

Restriction Sites: ECoRI-NOT

ACCN: NM_005656

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 TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA

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.
RefSeq:	NM_005656.2, NP_005647.2
RefSeq Size:	3226 bp
RefSeq ORF:	1479 bp
Locus ID:	7113
UniProt ID:	O15393
Cytogenetics:	21q22.3
Domains:	SR, Tryp_SPc, ldl_recept_a
Protein Families:	Druggable Genome, Protease, Secreted Protein, Transmembrane
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] 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.