

Product datasheet for **RC239594**

Matriptase 2 (TMPRSS6) (NM_001289001) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Tag:	Myc-DDK
Symbol:	Matriptase 2
Synonyms:	IRIDA; MT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



ORF Nucleotide Sequence: >RC239594 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGCCCGTGGCCGAGGCCCCCCAGGTGGCTGGCGGGCAGGGGACGGAGGTGATGGCGAGGAAGCGGAGC
CGGAGGGGATGTTCAAGGCCTGTGAGGACTCCAAGAGAAAAGCCCGGGGCTACCTCCGCCTGGTGCCCT
GTTTGTGCTGCTGGCCCTGCTCGTGTGGCTTCGGCGGGGTGCTACTCTGGTATTTCTAGGGTACAAG
GCGGAGGTGATGGTCAGCCAGGTGTACTCAGGCAGTCTGCGTGTACTCAATCGCCACTTCTCCCAGGATC
TTACCCGCGGGGAATCTAGTGCCTTCGCGAGTGAACCGCCAAAGCCAGAAGATGCTCAAGGAGCTCAT
CACCAGCACCCGCTGGGAACCTACTACAACCTCAGCTCCGTCTATTCTTTGGGGAGGGACCCCTCACC
TGCTTCTTCTGGTTCATTCTCAAATCCCCGAGCACCGCCGGCTGATGCTGAGCCCCGAGGTGGTGCAGG
CACTGCTGGTGGAGGAGCTGCTGTCCACAGTCAACAGCTCGGCTGCCGTCCCCTACAGGGCCGAGTACGA
AGTGGACCCCGAGGGCCTAGTGATCCTGGAAGCCAGTGTAAAGACATAGCTGCATTGAATTCACGCTG
GGTTGTTACCGCTACAGTACGTGGGCCAGGGCCAGGTCTCCGGCTGAAGGGGCTGACCACTGGCCT
CCAGCTGCCTGTGGCACCTGCAGGGCCCCAAGGACCTCATGCTCAAACCTCCGGCTGGAGTGGACGCTGGC
AGAGTGCCGGGACCGACTGGCCATGTATGACGTGGCGGGGCCCTGGAGAAGAGGCTCATCACCTCGGTG
TACGGCTGCAGCCGCCAGGAGCCCGTGGTGGAGTTCTGGCGTGGGGGCCATCATGGCGGTGCTGTGA
AGAAGGGCCTGCACAGCTACTACGACCCCTTCGTGCTCTCCGTGCAGCCGGTGGTCTTCCAGGCCGTGA
AGTGAACCTGACGCTGGACAACAGGCTCGACTCCAGGGCGTCTCAGCACCCGCTACTTCCCCAGCTAC
TACTCGCCCCAAACCCACTGCTCCTGGCACCTCACGGTGCCCTCTCTGGACTACGGCTTGGCCCTCTGGT
TTGATGCCTATGCACTGAGGAGGCAGAAGTATGATTTGCCGTGCACCCAGGGCCAGTGGACGATCCAGAA
CAGGAGGCTGTGTGGCTTGCGCATCTGCAGCCCTACGCCGAGAGGATCCCCGTGGTGGCCACGGCCGGG
ATCACCATCAACTTCACCTCCAGATCTCCCTACCCGGGCCGGGTGTGCGGGTGCACTATGGCTTGATACA
ACCAGTCGGACCCCTGCCCTGGAGAGTTCCTCTGTTCTGTGAATGGACTCTGTGTCCCTGCCTGTGATGG
GGTCAAGGACTGCCCCAACGGCCTGGATGAGAGAACTGCGTTTGAGAGCCACATTCCAGTGCAAAGAG
GACAGCACATGCATCTCACTGCCAAGGTCTGTGATGGGCAGCCTGATTGTCTCAACGGCAGCGACGAAG
AGCAGTGCCAGGAAGGGGTGCCATGTGGGACATTCACCTTCCAGTGTGAGGACCGGAGCTGCGTGAAGAA
GCCCCAACCCGAGTGTGATGGCGGGCCGACTGCAGGGACGGCTCGGATGAGGAGCACTGTGACTGTGGC
CTCCAGGGCCCTCCAGCCGATTGTTGGTGGAGCTGTGCTCCTCCGAGGGTGTGAGTGGCCATGGCAGGCCA
GCCTCCAGGTTTCGGGGTCGACACATCTGTGGGGGGCCCTCATCGCTGACCGCTGGGTGATAACAGCTGC
CCACTGCTTCCAGGAGGACAGCATGGCCTCCACGGTGTGTGGACCGTGTTCCTGGGCAAGGTGTGGCAG
AACTCGCGCTGGCTGGAGAGGTGTCTTCAAGGTGAGCCGCCTGCTCTGCACCCGTACCACGAAGAGG
ACAGCCATGACTACGACGTGGCGCTGCTGCAGCTCGACACCCGGTGGTGCCTCGGCCGCCGTGCGCCC
CGTCTGCCTGCCCCGCGCTCCCACTTCTTCGAGCCCGGCCCTGCACTGCTGGATTACGGGCTGGGGCGCC
TTGCGCGAGGGCGGCCCATCAGCAACGCTCTGCAGAAAGTGATGTGAGTTGATCCACAGGACCTGT
GCAGCGAGGTCTATCGTACCAGGTGACGCCACGCATGCTGTGTGCCGGCTACCGCAAGGGCAAGAAGGA
TGCCTGTAGGGTGAATCAGGTGGTCCGCTGGTGTGCAAGGCACTAGTGGCCGCTGTTCTTGGCGGG
CTGGTCAGCTGGGGCTGGGCTGTGGCCGGCTAACTACTTCGGCTCTACACCGCATCACAGGTGTGA
TCAGCTGGATCCAGCAAGTGGTGACC

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC239594 protein sequence
Red=Cloning site Green=Tags(s)

MPVAEAPQVAGQGDDGDEEAEPEGMFKACEDSKRKARGYLRLVPLFVLLALLVLASAGVLLWYFLGYK
AEVMVSQVYSGSLRVLNRHFSQDLTRRESSAFRSETAKAQKMLKELITSTRLTGYNSSSVYSFGEGPLT
CFFWFILQIPEHRLMLSPEVQALLVEELLSTYNSSAAVPYRAEYEVDPGLVILEASVKDIAALNSTL
GCYRYSYVGQGVRLRKGPDHLASSCLWHLQGPKDMLKLREWLTAECRDLRAMYDVGAPLEKRLITSV
YGCSCRSPVEVLASGAIMAVWVKGLHSYDPFVLSQPVQVFQACEVNLTLDRNLDQSGVLSTPYFPSY
YSPQTHCSVHLLTPSLDYGALLHFDAYALRRQKYLDPCTQGQWITQNRRLCGLRILQPYAERIPVWATAG
ITINFTSQISL TGPGRVRYHYGLYNQSDPCPEGFLCSVNGLCVPACDGVKDCPNGLDERNCVCRATFQCKE
DSTCISLPKVCDDQPDCLNGSDEEQCEQGVPCGTFTFQCEDRSCVKKPNPQCDGRPCDRDGSDEEHDCG
LQGPSRRIYGGAVSSEGEWPWQASLQVRGRHICGAL IADRWVITA AHCFQEDSMAS TLWT VFLGK VYQ
NSRWPGEVSFKVSRLLLHPYHEEDSHEYDVALQLDHPVVRSAAVRPVCLPARSHFFEPGLHCWITGWGA
LRSWGPISNALQGKVDVQLIPQDLCHDYVQVITPRMLCAGYRKGGKDACQDGGGLVCKALSGRWF
LAG LVGGGLCGGRPNKYGVYTRITIGVISWTOOVVT

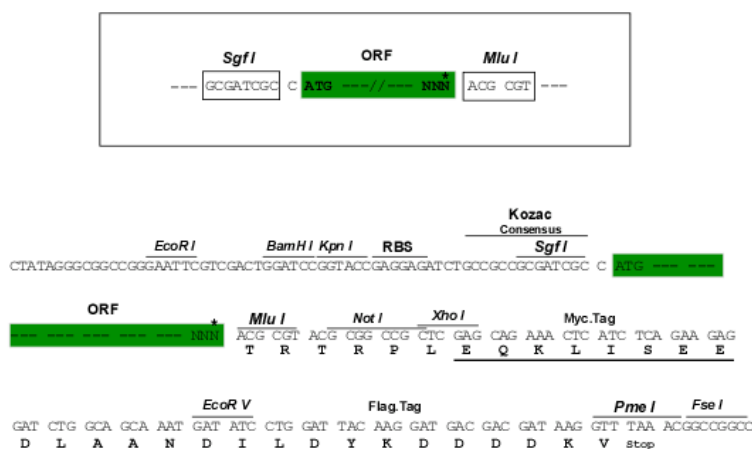
TRTRPLEOKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN:

NM_001289001

ORF Size:

2406 bp

OTI Disclaimer:

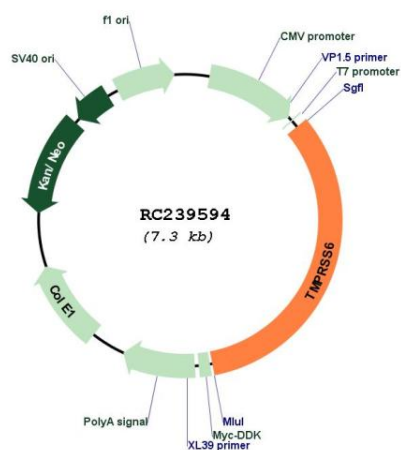
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in 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_001289001.2</u>
RefSeq Size:	3140 bp
RefSeq ORF:	2409 bp
Locus ID:	164656
UniProt ID:	<u>Q8IU80</u>
Cytogenetics:	22q12.3
Protein Families:	Druggable Genome, Protease, Transmembrane
MW:	88.9 kDa
Gene Summary:	The protein encoded by this gene is a type II transmembrane serine proteinase that is found attached to the cell surface. The encoded protein may be involved in matrix remodeling processes in the liver. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Jan 2014]

Product images:



Circular map for RC239594