

## Product datasheet for **RC212708**

### Matriptase 2 (TMPRSS6) (NM\_153609) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Matriptase 2 (TMPRSS6) (NM_153609) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Matriptase 2
Synonyms:	IRIDA; MT2
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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**ORF Nucleotide Sequence:**

>RC212708 representing NM\_153609  
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
 GCC**CGGATCGCC**

ATGTTGTTACTCTTCCACTCCAAAAGGATGCCCGTGGCCGAGGCCCCAGGTGGCTGGCGGGCAGGGG  
 ACGGAGGTGATGGCGAGGAAGCGGAGCCAGAGGGGATGTTCAAGGCCTGTGAGGACTCCAAGAGAAAAGC  
 CCGGGGCTACCTCCGCTGGTGCCCTGTTGTGCTGCTGGCCCTGCTCGTGCTGGCTTCGGCGGGGGTG  
 CTA CTCTGGTATTTCTAGGGTACAAGCGGAGGTGATGGTCAGCCAGGTGTA CTACTCAGGCAGTCTGCGTG  
 TACTCAATCGCCACTTCTCCAGGATCTTACCCGCCGGGAATCTAGTGCCCTCCGCGAGTAAACCGCCAA  
 AGCCCAGAAGATGCTCAAGGAGCTCATCACCAGCACCCGCTGGGA ACTACTACA ACTCCAGCTCCGTC  
 TATTCCTTTGGGAGGGACCCCTCACCTGCTTCTTCTGGTTTATTCTCCAATCCCCGAGCACCGCCGGC  
 TGATGCTGAGCCCGAGGTGGTGCAGGCACTGCTGGTGGAGGAGCTGCTGTCCACAGTCAACAGCTCGGC  
 TGCCGTCCCTACAGGGCCGAGTACGAAGTGGACCCCGAGGGCCTAGTGATCCTGGAAGCCAGTGTGAAA  
 GACATAGCTGCATTGAATTCACGCTGGTTGTTACCGCTACAGCTACGTGGGCCAGGGCCAGGTCTCC  
 GGCTGAAGGGGCCTGACCACCTGGCCTCCAGCTGCCTGTGGCACCTGCAGGGCCCGAGGACCTCATGCT  
 CAAACTCCGGCTGGAGTGGACGCTGGCAGAGTGGCCGGGACCGACTGGCCATGTATGACGTGGCCGGGCC  
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 GCAGCCGGTGGTCTTCCAGGCCTGTGAAGTGAACCTGACGCTGGACAACAGGCTCGACTCCCAGGGCGTC  
 CTCAGCACCCGTA CTCTCCAGCTACTACTCACCCAAACCCACTGCTCCTGGCACCTCACGGTGCCCT  
 CTCTGGACTACGGCTTGGCCCTTGTTGTGATGCCTATGCACTGAGGAGGCAGAAGTATGATTTGCCGTG  
 CACCCAGGGCCAGTGGACGATCCAGAACAGGAGCTGTGTGGCTTGCGCATCCTGCAGCCCTACGCCGAG  
 AGGATCCCGTGGTGGCCACGGCCGGGATCACCATCAACTTACCTCCAGATCTCCCTACCGGGCCCG  
 GTGTGCGGGTGCATATGGCTTGTACAACCAGTCGGACCCCTGCCCTGGAGAGTTCCTCTGTTCTGTGAA  
 TGGACTCTGTGTCCTGCCTGTGATGGGGTCAAGGACTGCCCAACGGCCTGGATGAGAGAACTGCGTT  
 TGCAGAGCCACATTCCAGTCAAAGAGGACAGCACATGCATCTCACTGCCAAGGTCTGTGATGGGCAGC  
 CTGATTGTCTCAACGGCAGCGACGAAGAGCAGTGCAGGAAGGGGTGCCATGTGGACATTACCTTCCA  
 GTGTGAGGACCGAGCTGCGTGAAGAAGCCCAACCCGAGTGTGATGGGGGCCCGACTGCAGGGACGGC  
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 CCGAGGGTGAGTGGCCATGGCAGGCCAGCTCCAGGTTCCGGGTGCGACACATCTGTGGGGGGCCCTCAT  
 CGCTGACCCTGGGTGATAACAGCTGCCACTGCTTCCAGGAGGACAGCATGGCCTCCACGGTGTGTGG  
 ACCGTGTTCTGGGCAAGGTGTGGCAGAACTCGCGCTGGCCTGGAGAGGTGTCCTTCAAGGTGAGCCGCC  
 TGCTCCTGCACCCGTACCACGAAGAGGACAGCCATGACTACGACGTGGCGCTGCTGCAGCTCGACCACCC  
 GGTGGTGCCTCGGCCCGCTGCGCCCGTCTGCCTGCCCGCGCTCCCACTTCTTCGAGCCCGCCCTG  
 CACTGCTGGATTACGGGCTGGGGCGCTTGCAGGAGGGCGGCCCATCAGCAACGCTCTGCAGAAAGTGG  
 ATGTGCAGTTGATCCACAGGACCTGTGCAGCGAGGTCTATCGCTACCAGGTGACGCCACGCATGCTGTG  
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 CTAGTGGCCGCTGGTTCTGGCGGGGCTGGTCACTGGGGCCTGGGCTGTGGCCGGCCTAACTACTTCG  
 CGTCTACACCCGCATCACAGGTGTGATCAGCTGGATCCAGCAAGTGGTGACC

**ACGCGT**ACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
 ACAAGGATGACGACGATAAGGTTTAA

**Protein Sequence:** >RC212708 representing NM\_153609  
Red=Cloning site Green=Tags(s)

MLLLFHSKRMPVAEAPQVAGGQGDGGDGEAEPEGMFKACEDSKRKARGYLRLVPLFVLLALLVLASAGV  
LLWYFLGYKAEVMVSQVYSGSLRVLNRHFSQDLTRRESSAFRSETAKAQKMLKELITSTRLGTYYNSSSV  
YSFGEGPLTCFFWFILQIPEHRRMLMSPEVVQALLVEELLSTVNSSAAVPYRAEYEVDPGLVILEASVK  
DIAALNSTLGCYRYSYVGQGVLRLLKGPDLASSCLWHLQGPEDMLKLRLEWTLAECRDLAMYDVAGP  
LEKRLITSVYGC SRQEPVVEVLASGAIMAVVWKKGLHSYYDPFVLSVQPVVFQACEVNLTLNRLDSQGV  
LSTPYFPSYSPQTHCSWHLTVPSLDYGLALWFDAYALRRQKYDLPCTQGQWTIQNRRLCGLRILQPYAE  
RIPVVATAGITINFTSQISLTGPGVRVHYGLYNQSDPCPGEFLCSVNGLCVPACDGVKDCPNGLDERNCV  
CRATFQCKEDSTCISLPKVCDGQPDCLNGSDEEQCEGVP CGTTFQCEDRSCVKKPNPQC DGRPD CRDG  
SDEEHCDCLQG PSSRIVGGAVSSEGEWPQASLQVRGRHICGGALIADRWVITAAHCFQEDSMAS TVLW  
TVFLGKVWQNSRWPGEVSFKVSRLLLHPYHEEDSHDYD VALLQLDHPVVRSAAVRPVCLPARSHFFEPGL  
HCWITGWGALREGGPISNALQKVDVQLIPQDLCSEVYRYQVTPRMLCAGYRKGKKDACQGDSSGGLVCKA  
LSGRWFLAGLVSWGLGCGRPNYFGVYTRITGVISWIQQVVT

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Chromatograms:** [https://cdn.origene.com/chromatograms/mg3047\\_c01.zip](https://cdn.origene.com/chromatograms/mg3047_c01.zip)

**Restriction Sites:** Sgfl-Mlul

**Cloning Scheme:**


**ACCN:** NM\_153609

**ORF Size:** 2433 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.

**RefSeq:** [NM\\_153609.3](#)

**RefSeq Size:** 3212 bp

**RefSeq ORF:** 2409 bp

**Locus ID:** 164656

**UniProt ID:** [Q8IU80](#)

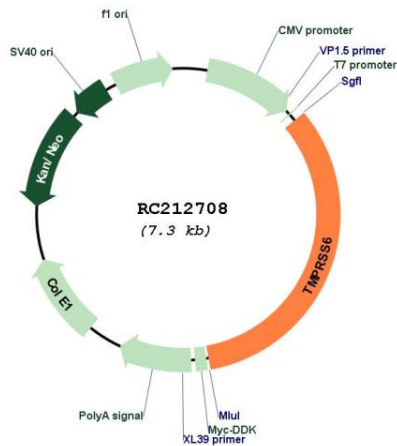
**Cytogenetics:** 22q12.3

**Protein Families:** Druggable Genome, Protease, Transmembrane

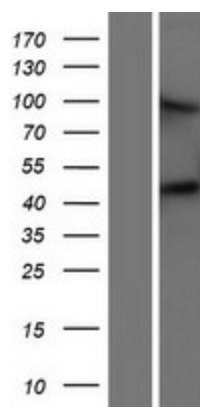
**MW:** 89.8 kDa

**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 RC212708



Western blot validation of overexpression lysate (Cat# [LY407024]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC212708 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).