

Product datasheet for **RG222100**

MMP24 (NM_006690) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MMP24 (NM_006690) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MMP24
Synonyms:	MMP-24; MMP25; MT-MMP 5; MT-MMP5; MT5-MMP; MT5MMP; MTMMP5
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide Sequence:

>RG222100 representing NM_006690
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGCCGAGGAGCCGGGGCGCCGCGCGCGCGGGCCGCGCCGCGCCGCCGCCGCGCGGGCCAGGCC
 CGCGCTGGAGCCGCTGGCGGGTCCCTGGGCGGCTGCTGCTGCTGCTGCCCGCTCTGCTGCCCTCC
 GGGCGCCGCGCGGGCGGGCGGCGGGGAGGAAACCGGCAGCGGTGGCGGTGGCGGTGGCG
 CGGGCGGACGAGGCGGAGGCGCCCTTCGCCGGCAGAAGTGGTTAAAGTCTATGGCTATCTGCTCCCT
 ATGACTCACGGGCATCTGCGCTGCACTCAGCGAAGGCCTTGCACTCGGCAGTCTCCACTATGCAGCAGTT
 TTACGGGATCCCGGTACCGGTGTGTTGGATCAGACAACGATCGAGTGGATGAAGAAACCCCGATGTGGT
 GTCCTGATCACCCCACTTAAGCCGTAGGCGGAGAAACAAGCGCTATGCCCTGACTGGACAGAAGTGA
 GGCAAAAACACATCACCTACAGCATTACAACATATACCCAAAAGTGGGTGAGCTAGACACGCGAAAGC
 TATTCGCCAGGCTTCGATGTGTGGCAGAAGGTGACCCCACTGACCTTTGAAGAGGTGCCATACCATGAG
 ATCAAAAGTGACCGGAAGGAGGCAGACATCATGATCTTTTTTGCTTCTGGTTTCCATGGCGACAGCTCCC
 CATTGATGGAGAAGGGGATTCTGGCCCATGCCTACTTCCCTGGCCAGGGATTGGAGGAGACACCCA
 CTTTGACTCCGATGAGCCATGGACGCTAGGAAATGCCAACATGACGGGAACGACCTTCTCTGGTGGCT
 GTGCATGAGCTGGGCCACGCGCTGGGACTGGAGCACTCCAGCGACCCAGCGCCATCATGGCGCCCTTCT
 ACCAGTACATGGAGACGCACAACCTCAAGCTGCCCCAGGACGATCTCCAGGGCATCCAGAAGATCTATGG
 ACCCCAGCCGAGCCTCTGGAGCCACAAGGCCACTCCCTACACTCCCCGTCCGAGGATCCACTCACCA
 TCGGAGAGGAAACAGAGCGCCAGCCAGGCCCTCGGCCGCCCTCGGGGACCGGCCATCCACACCCAG
 GCACAAAACCAACATCTGTGACGGCAACTTCAACACAGTGGCCCTTCCGGGGCGAGATGTTTGTCTT
 TAAGGATCGCTGGTTCTGGCGTCTGCGCAATAACCGAGTGCAGGAGGGCTACCCCATGCAGATCGAGCAG
 TTCTGGAAGGGCCTGCCTGCCCGCATCGACGCAGCCTATGAAAGGGCCGATGGGAGATTTGTCTTCTTCA
 AAGGTGACAAGTATTGGGTGTTAAGGAGGTGACGGTGGAGCCTGGGTACCCACAGCCTGGGGGAGCT
 GGGCAGCTGTTTGCCCGTGAAGGCATTGACACAGCTCTGCGCTGGGAACCTGTGGGCAAGACCTACTTT
 TTCAAAGCGAGCGGTACTGGCGCTACAGCGAGGAGCGGGCCACGGACCTGGCTACCTAAGCCCA
 TCACCGTGTGGAAGGGCATCCCACAGGCTCCCCAAGGAGCCTTCATCAGCAAGGAAGGATATTACACCTA
 TTTCTACAAGGGCCGGGACTACTGGAAGTTTGACAACCAGAACTGAGCGTGGAGCCAGGCTACCCGCGC
 AACATCCTGCGTACTGGATGGGCTGCAACCAGAAGGAGTGGAGCGGCGGAAGGAGCGGCGGCTGCCCC
 AGGACGAGTGGACATCATGGTACCATCAACGATGTGCCGGGCTCCGTGAACCGCGTGGCGGTGTCAT
 CCCCTGCATCCTGTCCCTCTGCATCCTGGTGTGCTACACCATCTTCCAGTTCAGAACAAGACAGGC
 CCTCAGCCTGTCACCTACTATAAGCGGCCAGTCCAGGAATGGGTG

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG222100 representing NM_006690
 Red=Cloning site Green=Tags(s)

MPSRSGRAAPGPPPPPPGQAPRWSRWRVPGRLLLLLLALCCLPGAARAAAAAGAGNRAAVAVAVA
 RADEAEAPFAGQNLKSYGYLLPYDSRASALHSAKALQSAVSTMQQFYGIPVTGVLDQTTIEWMCKPRCG
 VPDHPLSRRRRNKRYALTGQKWRQKHITYSIHNYTPKVGELDRKAIRQAFDVWQKVTPLTFEEVPHYE
 IKSDRKEADIMIFFASGFHGDSSPFDGEGFLAHAYFPGPIGGDTHFDSDEPWTLGNANHDGNDLFLVA
 VHELGHALGLEHSSDPSAIMAPFYQYMETHNFKLPQDDLQGIQKIYGPPEPLEPTRPLPTLPVRRIHSP
 SERKHERQPRPPRPLGDRPSTPGTKPNICDGNFNTVALFRGEMFVKDRWFWRLRNNRVQEGYPMQIEQ
 FWKGLPARIDAAYERADGRFVFFKGDYVWFKEVTVEPGYPHSLGELGSCLPREGIDTALRWEVPGKTYF
 FKGERYWRYSEERRATDPGYPKPIVWKGIPQAPQGAFISKEGYTYFYKGRDYWKFDNQKLSVEPGYPR
 NILRDWMCNQKEVERRKERRLPQDDVDIMVTINDVPGSVNAVAVVIPCILSLCILLVVYIFQFKNKTG
 PQPVTYYKRPVQEWV

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



ACCN: NM_006690

ORF Size: 1935 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_006690.4](#)

RefSeq Size: 4344 bp

RefSeq ORF: 1938 bp

Locus ID: 10893

UniProt ID: [Q9Y5R2](#)

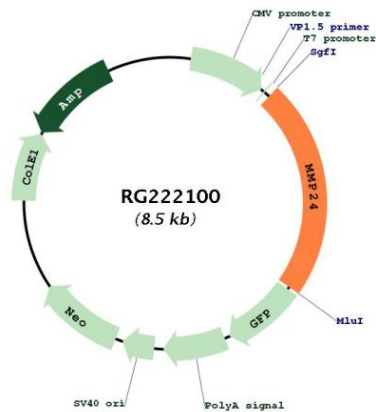
Cytogenetics: 20q11.22

Domains: hemopexin, Peptidase_M10, ZnMc

Protein Families: Druggable Genome, Transmembrane

Gene Summary: This gene encodes a member of the peptidase M10 family of matrix metalloproteinases (MMPs). Proteins in this family are involved in the breakdown of extracellular matrix in normal physiological processes, such as embryonic development, reproduction, and tissue remodeling, as well as in disease processes, such as arthritis and metastasis. The encoded preproprotein is proteolytically processed to generate the mature protease. Unlike most MMPs, which are secreted, this protease is a member of the membrane-type MMP (MT-MMP) subfamily, contains a transmembrane domain and is expressed at the cell surface. Substrates of this protease include the proteins cadherin 2 and matrix metalloproteinase 2 (also known as 72 kDa type IV collagenase). The gene has previously been referred to as MMP25 but has been renamed matrix metalloproteinase 24 (MMP24). [provided by RefSeq, Oct 2019]

Product images:



Circular map for RG222100