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Product datasheet for RG208917

MMP14 (NM_004995) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MMP14 (NM_004995) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	MMP14
Synonyms:	MMP-14; MMP-X1; MT-MMP; MT-MMP 1; MT1-MMP; MT1MMP; MTMMP1; WNCHRS
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

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ORF Nucleotide Sequence:

>RG208917 representing NM_004995
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTCTCCCGCCCCAAGACCCTCCCGTTGTCTCCTGCTCCCCCTGCTCACGCTCGGCACCGCGCTCGCCT
CCCTCGGCTCGGCCCAAAGCAGCAGCTTCAGCCCCGAAGCCTGGCTACAGCAATATGGCTACCTGCCTCC
CGGGGACCTACGTACCCACACACAGCGCTCACCCCAGTCACTCTCAGCGGCCATCGCTGCCATGCAGAAG
TTTTACGGCTTGCAAGTAACAGGCAAAGCTGATGCAGACACCATGAAGGCCATGAGGCGCCCCCGATGTG
GTGTTCCAGACAAGTTTGGGGCTGAGATCAAGGCCAATGTTCGAAGGAAGCGCTACGCCATCCAGGGTCT
CAAATGGCAACATAATGAAATCACTTTCTGCATCCAGAATTACACCCCCAAGGTGGGCGAGTATGCCACA
TACGAGGCCATTCGCAAGGCGTTCCGCGTGTGGGAGAGTGCCACACCACTGCGCTTCCGCGAGGTGCCCT
ATGCCTACATCCGTGAGGGCCATGAGAAGCAGGCCGACATCATGATCTTCTTTGCCGAGGGCTTCCATGG
CGACAGCACGCCCTTCGATGGTGAGGGCGGCTTCCTGGCCCATGCCTACTTCCCAGGCCCCAACATTGGA
GGAGACACCCACTTTGACTCTGCCGAGCCTTGGACTGTCAGGAATGAGGATCTGAATGGAAATGACATCT
TCCTGGTGGCTGTGCACGAGCTGGGCCATGCCCTGGGGCTCGAGCATTCCAGTGACCCCTCGGCCATCAT
GGCACCCTTTTACCAGTGGATGGACACGGAGAATTTTGTGCTGCCCGATGATGACCGCCGGGGCATCCAG
CAACTTTATGGGGGTGAGTCAGGGTTCCCCACCAAGATGCCCCCTCAACCCAGGACTACCTCCCGGCCTT
CTGTTCCTGATAAACCCAAAAACCCCACCTATGGGCCCAACATCTGTGACGGGAACTTTGACACCGTGGC
CATGCTCCGAGGGGAGATGTTTGTCTTCAAGGAGCGCTGGTTCTGGCGGGTGAGGAATAACCAAGTGATG
GATGGATACCCAATGCCCATTGGCCAGTTCTGGCGGGGCCTGCCTGCGTCCATCAACACTGCCTACGAGA
GGAAGGATGGCAAATTCGTCTTCTTCAAAGGAGACAAGCATTGGGTGTTTGATGAGGCGTCCCTGGAACC
TGGCTACCCCAAGCACATTAAGGAGCTGGGCCGAGGGCTGCCTACCGACAAGATTGATGCTGCTCTCTTC
TGGATGCCCAATGGAAAGACCTACTTCTTCCGTGGAAACAAGTACTACCGTTTCAACGAAGAGCTCAGGG
CAGTGGATAGCGAGTACCCCAAGAACATCAAAGTCTGGGAAGGGATCCCTGAGTCTCCCAGAGGGTCATT
CATGGGCAGCGATGAAGTCTTCACTTACTTCTACAAGGGGAACAAATACTGGAAATTCAACAACCAGAAG
CTGAAGGTAGAACCGGGCTACCCCAAGTCAGCCCTGAGGGACTGGATGGGCTGCCCATCGGGAGGCCGGC
CGGATGAGGGGACTGAGGAGGAGACGGAGGTGATCATCATTGAGGTGGACGAGGAGGGCGGCGGGGCGGT
GAGCGCGGCTGCCGTGGTGCTGCCCGTGCTGCTGCTGCTCCTGGTGCTGGCGGTGGGCCTTGCAGTCTTC
TTCTTCAGACGCCATGGGACCCCCAGGCGACTGCTCTACTGCCAGCGTTCCCTGCTGGACAAGGTC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence:

>RG208917 representing NM_004995
Red=Cloning site Green=Tags(s)

MSPAPRPSRCLLLPLLTLGTALASLGSAQSSSFSPEAWLQQYGYLPPGDLRTHTQRSPQSLSAAIAAMQK
FYGLQVTGKADADTMKAMRRPRCGVPDKFGAEIKANVRRKRYAIQGLKWQHNEITFCIQNYTPKVGEYAT
YEAIRKAFRVWESATPLRFREVPYAYIREGHEKQADIMIFFAEGFHGDSTPFDGEGGFLAHAYFPGPNIG
GDTHFDSAEPWTVRNEDLNGNDIFLVAVHELGHALGLEHSSDPSAIMAPFYQWMDTENFVLPDDDRRGIQ
QLYGGESGFPTKMPPQPRTTSRPSVPDKPKNPTYGPNICDGNFDTVAMLRGEMFVFKERWFWRVRNNQVM
DGYPMPIGQFWRGLPASINTAYERKDGKFVFFKGDKHWVFDEASLEPGYPKHIKELGRGLPTDKIDAALF
WMPNGKTYFFRGNKYYRFNEELRAVDSEYPKNIKVWEGIPESPRGSFMGSDEVFTYFYKGNKYWKFNNQK
LKVEPGYPKSALRDWMGCPSGGRPDEGTEEETEVIIIEVDEEGGGAVSAAAVVLPVLLLLLVLAVGLAVF
FFRRHGTPRRLLYCQRSLLDKV

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

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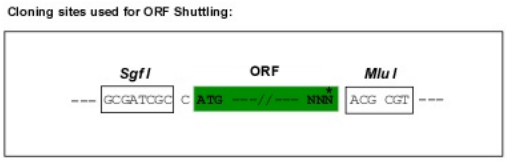
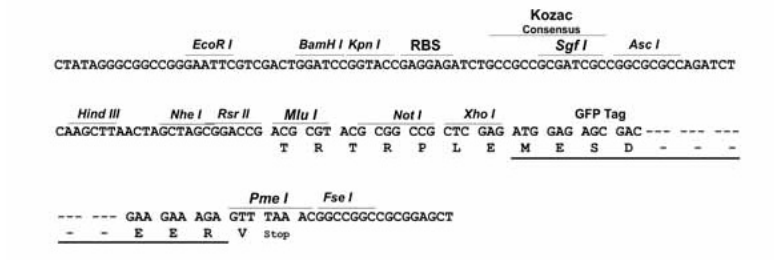
Cloning Scheme:





ACCN:	NM_004995
ORF Size:	1746 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_004995.2, NP_004986.1
RefSeq Size:	3558 bp
RefSeq ORF:	1749 bp
Locus ID:	4323
UniProt ID:	P50281
Cytogenetics:	14q11.2

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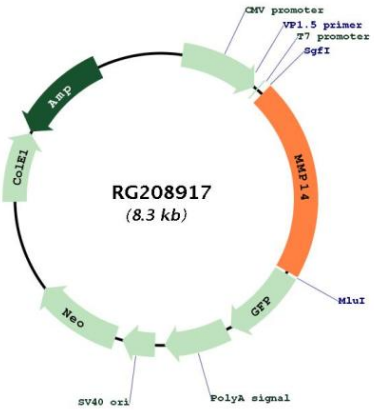
Domains: hemopexin, Peptidase_M10, ZnMc

Protein Families: Druggable Genome, Protease, Transmembrane

Protein Pathways: GnRH signaling pathway

Gene Summary: Proteins of the matrix metalloproteinase (MMP) 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. Most MMP's are secreted as inactive proproteins which are activated when cleaved by extracellular proteinases. However, the protein encoded by this gene is a member of the membrane-type MMP (MT-MMP) subfamily; each member of this subfamily contains a potential transmembrane domain suggesting that these proteins are expressed at the cell surface rather than secreted. This protein activates MMP2 protein, and this activity may be involved in tumor invasion. [provided by RefSeq, Jul 2008]

Product images:



Circular map for RG208917

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