

Product datasheet for RG201225

MMP7 (NM_002423) Human Tagged ORF Clone

Product data:

Product Type: Expression Plasmids

Product Name: MMP7 (NM_002423) Human Tagged ORF Clone

Tag: TurboGFP

Symbol: MMP7

Synonyms: MMP-7; MPSL1; PUMP-1

Mammalian Cell

Selection:

Neomycin

Vector: pCMV6-AC-GFP (PS100010)

E. coli Selection: Ampicillin (100 ug/mL)

ORF Nucleotide >RG201225 representing NM_002423

Sequence: Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC

GCCGCGATCGCC

ATATGGAAAGAAGAAGTAATTCAAGAAAGAAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence:

>RG201225 representing NM_002423
Red=Cloning site Green=Tags(s)

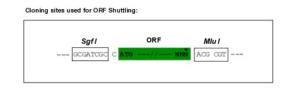
MRLTVLCAVCLLPGSLALPLPQEAGGMSELQWEQAQDYLKRFYLYDSETKNANSLEAKLKEMQKFFGLPI TGMLNSHVIEIMQKPRCGVPDVAEYSLFPNSPKWTSKVVTYRIVSYTRDLPHITVDRLVSKALNMWGKEI PLHFRKVVWGTADIMIGFARGAHGDSYPFDGPGNTLAHAFAPGTGLGGDAHFDEDERWTDGSSLGINFLY AATHELGHSLGMGHSSDPNAVMYPTYGNGDPQNFKLSQDDIKGIQKLYGKRSNSRKK

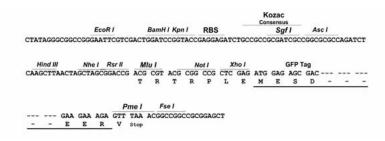
TRTRPLE - GFP Tag - V

Restriction Sites:

Sgfl-Mlul

Cloning Scheme:





ACCN: NM_002423

ORF Size: 801 bp

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 <a href="mailto:customercong: customercong: custom

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. <u>More info</u>

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 002423.2, NP 002414.1

RefSeq Size: 1127 bp RefSeq ORF: 804 bp Locus ID: 4316 **UniProt ID:** P09237 Cytogenetics: 11q22.2

Gene Summary:

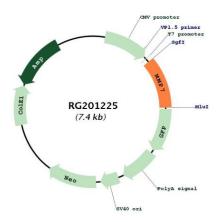
Protein Families: Druggable Genome, Protease

Protein Pathways: Wnt signaling pathway

> 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. This secreted protease breaks down proteoglycans, fibronectin, elastin and casein and differs from most MMP family members in that it lacks a conserved C-terminal hemopexin domain. The enzyme is involved in wound healing, and studies in mice suggest that it regulates the activity of defensins in intestinal mucosa. The gene is part of a cluster of MMP genes on chromosome 11. This gene exhibits elevated expression levels in multiple human cancers. [provided by RefSeq, Jan 2016]



Product images:



Circular map for RG201225