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Product datasheet for RC216665

MASP2 (NM_006610) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MASP2 (NM_006610) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MASP2
Synonyms:	MAP-2; MAP19; MASP-2; MASP1P1; sMAP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC216665 representing NM_006610
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGCTGCTGACCCTCCTGGGCCTTCTGTGTGGCTCGGTGGCCACCCCCTTGGGCCCGAAGTGGCCTG
AACCTGTGTTCGGGCGCCTGGCATCCCCCGGCTTTCCAGGGGAGTATGCCAATGACCAGGAGCGGCGCTG
GACCCTGACTGCACCCCCCGGCTACCGCCTGCGCCTCTACTTCACCCACTTCGACCTGGAGCTCTCCCAC
CTCTGCGAGTACGACTTCGTCAAGCTGAGCTCGGGGGCCAAGGTGCTGGCCACGCTGTGCGGGCAGGAGA
GCACAGACACGGAGCGGGCCCCTGGCAAGGACACTTTCTACTCGCTGGGCTCCAGCCTGGACATTACCTT
CCGCTCCGGCTACTCCAACGAGAAGCCGTTCACGGGGTTCGAGGCCTTCTATGCAGCCGAGGACATTGAC
GAGTGCCAGGTGGCCCCGGGAGAGGCGCCCACCTGCGACCACCACTGCCACAACCACCTGGGCGGTTTCT
ACTGCTCCTGCCGCGCAGGCTACGTCCTGCACCGTAACAAGCGCACCTGCTCAGCCCTGTGCTCCGGCCA
GGTCTTCACCCAGAGGTCTGGGGAGCTCAGCAGCCCTGAATACCCACGGCCGTATCCCAAACTCTCCAGT
TGCACTTACAGCATCAGCCTGGAGGAGGGGTTCAGTGTCATTCTGGACTTTGTGGAGTCCTTCGATGTGG
AGACACACCCTGAAACCCTGTGTCCCTACGACTTTCTCAAGATTCAAACAGACAGAGAAGAACATGGCCC
ATTCTGTGGGAAGACATTGCCCCACAGGATTGAAACAAAAAGCAACACGGTGACCATCACCTTTGTCACA
GATGAATCAGGAGACCACACAGGCTGGAAGATCCACTACACGAGCACAGCGCAGCCTTGCCCTTATCCGA
TGGCGCCACCTAATGGCCACGTTTCACCTGTGCAAGCCAAATACATCCTGAAAGACAGCTTCTCCATCTT
TTGCGAGACTGGCTATGAGCTTCTGCAAGGTCACTTGCCCCTGAAATCCTTTACTGCAGTTTGTCAGAAA
GATGGATCTTGGGACCGGCCAATGCCCGCGTGCAGCATTGTTGACTGTGGCCCTCCTGATTATCTACCCA
GTGGCCGAGTGGAGTACATCACAGGTCCTGGAGTGACCACCTACAAAGCTGTGATTCAGTACAGCTGTGA
AGAGACCTTCTACACAATGAAAGTGAATGATGGTAAATATGTGTGTGAGGCTGATGGATTCTGGACGAGC
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TTTATGAGGACAGATGACATTGGAACTGCATCTGGATGGGGATTAACCCAAAGGGGTTTTCTTGCTAGAA
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TCCAAGGGGAAGTGTAACTGCTAACATGCTTTGTGCTGGCTTAGAAAGTGGGGGCAAGGACAGCTGCAGA
GGTGACAGCGGAGGGGCACTGGTGTTTCTAGATAGTGAAACAGAGAGGTGGTTTGTGGGAGGAATAGTGT
CCTGGGGTTCCATGAATTGTGGGGAAGCAGGTCAGTATGGAGTCTACACAAAAGTTATTAACTATATTCC
CTGGATCGAGAACATAATTAGTGATTTT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC216665 representing NM_006610
Red=Cloning site Green=Tags(s)

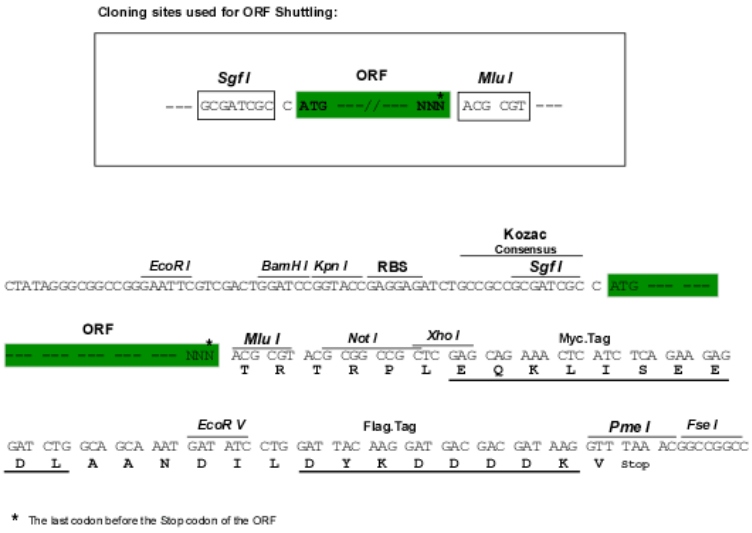
MRLLTLLGLLCGSVATPLGPKWPEPVFGRLASPGFPGEYANDQERRWTLTAPPGYRLRLYFTHFDLELSH
LCEYDFVKLSSGAKVLATLCGQESTDTERAPGKDTFYSLGSSLDITFRSGYSNEKPFTGFEAFYAAEDID
ECQVAPGEAPTCDHHCHNHLGGFYCSCRAGYVLHRNKRTCSALCSGQVFTQRSGELSSPEYPRPYPKLSS
CTYSISLEEGFSVILDFVESFDVETHPETLCPYDFLKIQTDREEHGPFCGKTLPHRIETKSNTVTITFVT
DESGDHTGWKIHYTSTAQPCPYPMAPPNGHVSPVQAKYILKDSFSIFCETGYELLQGHLPLKSFTAVCQK
DGSWDRPMPACSIVDCGPPDYLPSGRVEYITGPGVTTYKAVIQYSCEETFYTMKVNDGKYVCEADGFWTS
SKGEKSLPVCEPVCGLSARTTGGRIYGGQKAKPGDFPWQVLILGGTTAAGALLYDNWVLTAAHAVYEQKH
DASALDIRMGTLKRLSPHYTQAWSEAVFIHEGYTHDAGFDNDIALIKLNNKVVINSNITPICLPRKEAES
FMRTDDIGTASGWGLTQRGFLARNLMYVDIPIVDHQKCTAAYEKPPYPRGSVTANMLCAGLESGGKDSCR
GDSGGALVFLDSETERWFVGGIVSWGSMNCGEAGQYGVYTKVINYIPWIENIISDF

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6123_d09.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_006610

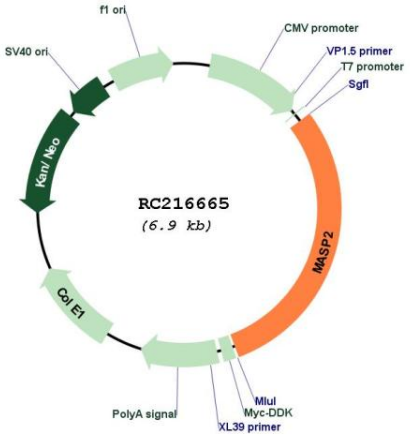
ORF Size: 2058 bp

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

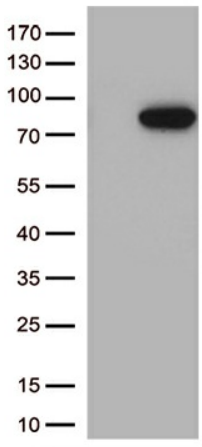
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_006610.4
RefSeq Size:	2460 bp
RefSeq ORF:	2061 bp
Locus ID:	10747
UniProt ID:	O00187
Cytogenetics:	1p36.22
Domains:	CCP, CUB, Tryp_SPc, EGF_CA, EGF
Protein Families:	Druggable Genome, Protease, Secreted Protein
Protein Pathways:	Complement and coagulation cascades
MW:	75.69 kDa
Gene Summary:	This gene encodes a member of the peptidase S1 family of serine proteases. The encoded preproprotein is proteolytically processed to generate A and B chains that heterodimerize to form the mature protease. This protease cleaves complement components C2 and C4 in order to generate C3 convertase in the lectin pathway of the complement system. The encoded protease also plays a role in the coagulation cascade through cleavage of prothrombin to form thrombin. Myocardial infarction and acute stroke patients exhibit reduced serum concentrations of the encoded protein. Alternative splicing results in multiple transcript variants, at least one of which encodes an isoform that is proteolytically processed. [provided by RefSeq, Feb 2016]

Product images:



Circular map for RC216665



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY MASP2 (Cat# RC216665, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-MASP2 (Cat# [TA812533])(1:500).