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Product datasheet for RC221839

MASP1 (NM_139125) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	MASP1 (NM_139125) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	MASP1
Synonyms:	3MC1; CRARF; CRARF1; MAP-1; MAP1; MAp44; MASP; MASP-3; MASP3; PRSS5; RaRF
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

View online »

ORF Nucleotide Sequence:

>RC221839 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGAGGTGGCTGCTTCTCTATTATGCTCTGTGCTTCTCCCTGTCAAAGGCTTCAGCCCACACCGTGGAGC
TAAACAATATGTTTGGCCAGATCCAGTCGCCTGGTTATCCAGACTCCTATCCCAGTGATTCAGAGGTGAC
TTGGAATATCACTGTCCCAGATGGGTTTCGGATCAAGCTTTACTTCATGCACTTCAACTTGGAATCCTCC
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AGACCACAGACACAGAGCAGACTCCCGGCCAGGAGGTGGTCCTCTCCCCTGGCTCCTTCATGTCCATCAC
TTTCCGGTCAGATTTCTCCAATGAGGAGCGTTTCACAGGCTTTGATGCCCACTACATGGCTGTGGATGTG
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ACTACTGCTCCTGCCGCTTCGGCTACATCCTCCACACAGACAACAGGACCTGCCGAGTGGAGTGCAGTGA
CAACCTCTTCACTCAAAGGACTGGGGTGATCACCAGCCCTGACTTCCCAAACCCTTACCCCAAGAGCTCT
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TCAGGAGCCCTATTACAAGATGCTCAACAATAACACAGGTATATATACCTGTTCTGCCCAAGGAGTCTGG
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ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC221839 protein sequence
Red=Cloning site Green=Tags(s)

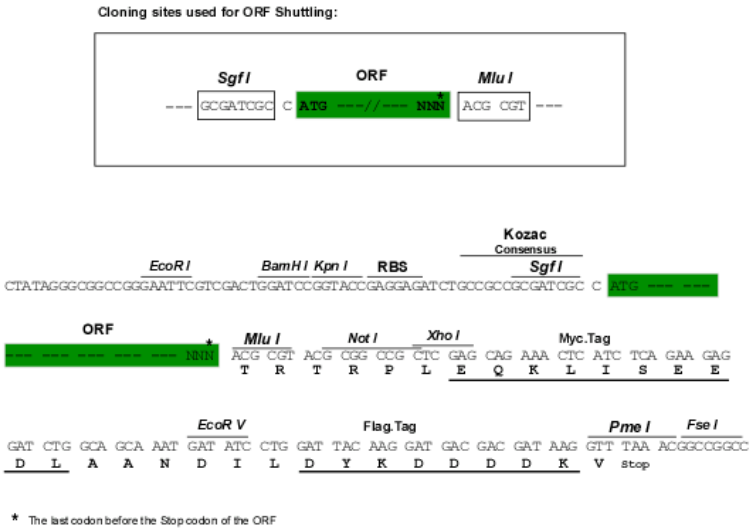
MRWLLLYYALCFSLSKASAHTVELNNMFGQIQSPGYPDSYPSDSEVTWNITVPDGFRIKLYFMHFNLESS
YLCEYDYVKVETEDQVLATFCGRETTDTEQTPGQEVVLSPGSFMSITFRSDFSNEERFTGFDAHYMAVDV
DECKEREDEELSCDHYCHNYIGGYYCSCRFGYILHTDNRTCRVECSDNLFTQRTGVITSPDFPNPYPKSS
ECLYTIELEEGFMVNLQFEDIFDIEDHPEVPCPYDYIKIKVGPKVLGPFCGEKAPEPISTQSHSVLILFH
SDNSGENRGWRLSYRAAGNECPELQPPVHGKIEPSQAKYFFKDQVLVSCDTGYKVLKDNVEMDTFQIECL
KDGTWSNKIPTCKIVDCRAPGELEHGLITFSTRNNLTTYKSEIKYSCQEPYYKMLNNNTGIYTCSAQGVW
MNKVLGRSLPTCLPECGQPSRSLPSLVKRIIGGRNAEPGLFPWQALIVVEDTSRVPNDKWFGSGALLSAS
WILTAAHVLRSQRRDTTVIPVSKEHVTVYLGLHDVRDKSGAVNSSAARVVLHPDFNIQNYNHDIALVQLQ
EPVPLGPHVMPVCLPRLEPEGPAPHMLGLVAGWGISNPNVTVDEIISSGTRTLSDVLQYVKLPVVPHAEC
KTSYESRSGNYSVTENMFCAGYYEGGKDTCLGDSGGAFVIFDDLSQRWVVQGLVSWGGPEECGSKQVYGV
YTKVSNYVDWVWEQMGLPQSVVEPQVER

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6446_h01.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_139125

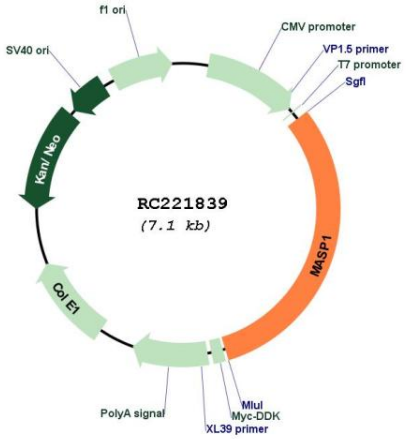
ORF Size: 2184 bp

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

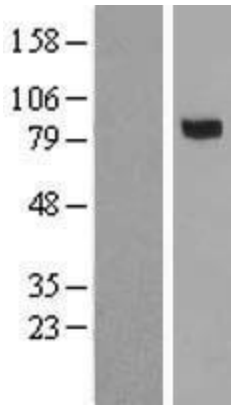
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_139125.4
RefSeq Size:	4184 bp
RefSeq ORF:	2187 bp
Locus ID:	5648
UniProt ID:	P48740
Cytogenetics:	3q27.3
Domains:	CCP, CUB, Tryp_SPc, EGF_CA
Protein Families:	Druggable Genome, Protease
Protein Pathways:	Complement and coagulation cascades
MW:	81.9 kDa
Gene Summary:	This gene encodes a serine protease that functions as a component of the lectin pathway of complement activation. The complement pathway plays an essential role in the innate and adaptive immune response. The encoded protein is synthesized as a zymogen and is activated when it complexes with the pathogen recognition molecules of lectin pathway, the mannose-binding lectin and the ficolins. This protein is not directly involved in complement activation but may play a role as an amplifier of complement activation by cleaving complement C2 or by activating another complement serine protease, MASP-2. The encoded protein is also able to cleave fibrinogen and factor XIII and may may be involved in coagulation. A splice variant of this gene which lacks the serine protease domain functions as an inhibitor of the complement pathway. Alternate splicing results in multiple transcript variants.[provided by RefSeq, Apr 2010]

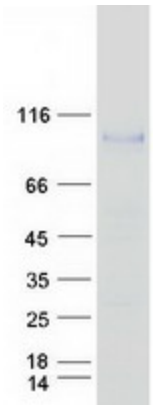
Product images:



Circular map for RC221839



Western blot validation of overexpression lysate (Cat# [LY408424]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC221839 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified MASP1 protein (Cat# [TP321839]). The protein was produced from HEK293T cells transfected with MASP1 cDNA clone (Cat# RC221839) using MegaTran 2.0 (Cat# [TT210002]).