

## **Product datasheet for SC302611**

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## MASP1 (NM\_001031849) Human Untagged Clone

**Product data:** 

**Product Type:** Expression Plasmids

**Product Name:** MASP1 (NM\_001031849) Human Untagged Clone

Tag: Tag Free
Symbol: MASP1

Synonyms: 3MC1; CRARF; CRARF1; MAP-1; MAP1; MAP4; MASP; MASP-3; MASP3; PRSS5; RaRF

Mammalian Cell

Selection:

None

Vector: pCMV6-XL5

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

Fully Sequenced ORF: >OriGene ORF sequence for NM\_001031849 edited

ATGAGGTGGCTGCTTCTCTATTATGCTCTGTGCTTCTCCCTGTCAAAGGCTTCAGCCCAC ACCGTGGAGCTAAACAATATGTTTGGCCAGATCCAGTCGCCTGGTTATCCAGACTCCTAT CCCAGTGATTCAGAGGTGACTTGGAATATCACTGTCCCAGATGGGTTTCGGATCAAGCTT TACTTCATGCACTTCAACTTGGAATCCTCCTACCTTTGTGAATATGACTATGTGAAGGTA GAAACTGAGGACCAGGTGCTGGCAACCTTCTGTGGCAGGGAGACCACAGACACAGAGCAG ACTCCCGGCCAGGAGGTGGTCCTCTCCCCTGGCTCCTTCATGTCCATCACTTTCCGGTCA GATTTCTCCAATGAGGAGCGTTTCACAGGCTTTGATGCCCACTACATGGCTGTGGATGTG GACGAGTGCAAGGAGGAGGACGAGGAGCTGTCCTGTGACCACTACTGCCACAACTAC ATTGGCGGCTACTACTGCTCCTGCCGCTTCGGCTACATCCTCCACACAGACAACAGGACC TGCCGAGTGGAGTGCAGTGACAACCTCTTCACTCAAAGGACTGGGGTGATCACCAGCCCT GACTTCCCAAACCCTTACCCCAAGAGCTCTGAATGCCTGTATACCATCGAGCTGGAGGAG GGTTTCATGGTCAACCTGCAGTTTGAGGACATATTTGACATTGAGGACCATCCTGAGGTG CCCTGCCCCTATGACTACATCAAGATCAAAGTTGGTCCAAAAGTTTTGGGGCCTTTCTGT GGAGAGAAAGCCCCAGAACCCATCAGCACCCAGAGCCACAGTGTCCTGATCCTGTTCCAT AGTGACAACTCGGGAGAACCGGGGCTGGAGGCTCTCATACAGGGCTGCAGGAAATGAG TGCCCAGAGCTACAGCCTCCTGTCCATGGGAAAATCGAGCCCTCCCAAGCCAAGTATTTC TTCAAAGACCAAGTGCTCGTCAGCTGTGACACAGGCTACAAAGTGCTGAAGGATAATGTG GAGATGGACACATTCCAGATTGAGTGTCTGAAGGATGGGACGTGGAGTAACAAGATTCCC ACCTGTAAAAAAATGAAATCGATCTGGAGAGCGAACTCAAGTCAGAGCAAGTGACAGAG

TGA

**Restriction Sites:** Please inquire **ACCN:** NM 001031849

**Insert Size:** 1300 bp



## MASP1 (NM\_001031849) Human Untagged Clone - SC302611

**OTI Disclaimer:** Our molecular clone sequence data has been matched to the reference identifier above as a

point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative

RNA splicing form or single nucleotide polymorphism (SNP).

**OTI Annotation:** This TrueClone is provided through our Custom Cloning Process that includes sub-cloning

into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

**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: <u>NM 001031849.1</u>, <u>NP 001027019.1</u>

 RefSeq Size:
 2072 bp

 RefSeq ORF:
 1143 bp

 Locus ID:
 5648

 UniProt ID:
 P48740

Cytogenetics:

**Protein Families:** Druggable Genome, Protease

3q27.3

**Protein Pathways:** Complement and coagulation cascades

**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]

Transcript Variant: This variant (3) differs in the 3' UTR and 3' coding region, compared to variant 1. The encoded isoform (3) is shorter and has a distinct C-terminus, compared to

isoform 1. This isoform (3) is referred to as MAp44 or MAP1 in the literature.