

## Product datasheet for **SC120698**

### **MASP1 (NM\_139125) Human Untagged Clone**

#### **Product data:**

|                           |   |
|---------------------------|---|
| Product Type:             | Expression Plasmids   |
| Product Name:             | MASP1 (NM_139125) Human Untagged Clone                                    |
| Tag:                      | Tag Free  |
| Symbol:                   | MASP1   |
| Synonyms:                 | 3MC1; CRARF; CRARF1; MAP-1; MAP1; MAp44; MASP; MASP-3; MASP3; PRSS5; RaRF |
| Mammalian Cell Selection: | None  |
| Vector:                   | <u><a href="#">pCMV6-XL4</a></u>  |
| E. coli Selection:        | Ampicillin (100 ug/mL)  |



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**Fully Sequenced ORF:** >NCBI ORF sequence for NM\_139125, the custom clone sequence may differ by one or more nucleotides

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ATGAGGTGGCTGCTTCTCTATTATGCTCTGTGCTTCTCCCTGTCAAAGGCTTCAGCCACACCGTGGAGC
TAAACAATATGTTTGGCCAGATCCAGTCGCCTGGTTATCCAGACTCCTATCCCAGTGATTCAGAGGTGAC
TTGGAATATCACTGTCCCAGATGGGTTTCGGATCAAGCTTACTTCATGCACTTCAACTTGAATCCTCC
TACCTTTGTGAATATGACTATGTGAAGGTAGAACTGAGGACCAGGTGCTGGCAACCTTCTGTGGCAGGG
AGACCACAGACACAGAGCAGACTCCCGGCCAGGAGGTGGTCTCTCCCCTGGCTCCTTATGTCCATCAC
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AGTGACAACCTCGGGAGAGAACCAGGGCTGGAGGCTCTCATACAGGGCTGCAGGAAATGAGTGCCAGAGC
TACAGCCTCCTGTCCATGGGAAAATCGAGCCCTCCCAAGCCAAGTATTTCTTCAAAGACCAAGTGCCTGT
CAGCTGTGACACAGGCTACAAAGTGCTGAAGGATAATGTGGAGATGGACACATCCAGATTGAGTGTCTG
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CAAGCCTGGTCAAGAGGATCATTGGGGGCCGAAATGCTGAGCCTGGCCTTTCCTGGCAGGCCCCGAT
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CCGAGTGGTGTCCACCCAGACTTCAACATCCAAAACATAACCACGATATAGCTCTGGTGCAGCTGCAG
GAGCCTGTGCCCTGGGACCCACGTTATGCCTGTCTGCCTGCCAAGGCTTGAGCCTGAAGGCCCGGCC
CCCACATGCTGGGCTGGTGGCCGGCTGGGGCATCTCCAATCCCAATGTGACAGTGGATGAGATCATCAG
CAGTGGCACACGGACCTTGTGAGATGCTCTGCAGTATGTCAAGTTACCCGTGGTGCCTCAGCTGAGTGC
AAAAGTACTATGAGTCCCGCTCGGGCAATTACAGCGTACGGGAGAACATGTTCTGTGCTGGCTACTACG
AGGGCGGCAAAGACACGTGCCTTGAGATAGCGGTGGGGCCTTTGTGATCTTTGATGACTTGAGCCAGCG
CTGGGTGGTGAAGGCTGGTGTCTGGGGGGACCTGAAGAATGCGGCAGCAAGCAGGTCTATGGAGTC
TACACAAAGGTCTCCAATTACGTGGACTGGGTGTGGGAGCAGATGGGCTTACCACAAAGTGTGTGGAGC
CCCAGGTGGAACGGTGA
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|                                     |   |
|-------------------------------------|---|
| <b>5' Read Nucleotide Sequence:</b> | <p>&gt;OriGene 5' read for NM_139125 unedited</p> <pre>GGTGCAAATTTTGTAAATACGACTCACTATAGGGCGGCCGGAATTCGGCACGAGGGGCAA GTCAAGCTGGGAGGACCAAGGCCGGCAGCCGGGAGCACCAAGGCAGGAAAATGAGGTG GCTGCTTCTCTATTATGCTCTGTGCTTCTCCCTGTCAAAGGCTTCAGCCACACCGTGA GCTAAACAATATGTTTGGCCAGATCCAGTCGCCTGGTTATCCAGACTCCTATCCCAGTGA TTCAGAGGTGACTTGAATATCACTGTCCAGATGGGTTTCGGATCAAGCTTTACTTCAT GCACCTCAACTTGAATCCTCCTACCTTTGTGAATATGACTATGTGAAGGTAGAAACTGA GGACCAGGTGCTGGCAACCTTCTGTGGCAGGGAGACCACAGACACAGAGCAGACTCCCGG CCAGGAGGTGGTCTCTCCCTGGCTCCTTCATGTCCATCACTTTCCGGTCAGATTTCTC CAATGAGGAGCGTTTACAGGCTTTGATGCCACTACATGGCTGTGGATGTGGACGAGTG CAAGGAGAGGGAGGACGAGGAGCTGTCCTGTGACCACTACTGCCACAACACTACATTGGCGG CTACTACTGCTCCTGCCGCTTCGGCTACATCCTCCACACAGACAACAGGACCTGCCGAGT GGAGTGCACTGACAACCTTCTCACTCAAAGGACTGGNGTGATCACCAGCCCTGACTTCCA AACCCCTTACCCAGAGCTCTNGATGCCTGTATACCATCGAGCTGGAAGAAGGTTTCATGG TCAACCTGCAGTTTGAGGACATATTTGACATTGAGGACCCATCCTGAGTGCCTGNCCT ATGACTACATCAAGATCAAAGTTGGTTCCAAAAGTTTGGGGCCTTCTGTGAGAGAAGC CCANAACCATCAGCCCCAGAGCCACAGTGTCTGATCCTGTTCCATAAG</pre> |
| <b>3' Read Nucleotide Sequence:</b> | <p>&gt;OriGene 3' read for NM_139125 unedited</p> <pre>NGGCCCTTGGTGATGGCACTCTCCGGTCCAGTAAAGCACTGGGGAAGGGGTCACAGGGCA TGCCACCCGGGCATCTGTTGCAGGAAAAGCTATGACCGCGCCGCAATCTAAAGTCGAGT TTTTTTTTTTTTTTTTTTTGGTTATCCACGAGGGTATATTTTCACTTGAGACCCTGA TGGGAGCAACAATGCAGAGGCCCTTACATAATGGTGAAGCATATGATATAAAAGATACA AAATATAACATCATTTACATGTGCCATTATAGACAAAGGAGTGTGTTTATGAGCCCGT TGGAGAAGTGGCACTTCCCAATCATTCCCTCTCAGGGGCTTCTCTGGCTGCCTTGCTCT GATGGAGATTTTCAGGAGAGAGACTCCTGGGAGAAGGAGAACAATCAGCCCTGTGAGGG CCAAAGAGGCTGTAGCAGTCAGGGAAGCTCTGAGTGCTCCAGCTAGAATGAACCTGCAG GGGACCTTATGCCAGCCTGTTGCTGACGGAGAACCCGAGACTCAGACAAAGAAAATGATT TTTTTCACTGCCTGCCATGGGTGAGCCTCTGATTCTTTGACTCTGAAAAATGAAGGAG TGGGCCCTCTGAACATCCTGCGGAGTGTATTCTCCGCCATCTCATGCCCAAGGATGC CAGGCAGCCTGTGAGATTTGGGTGACTTCTAATGTGCCACCCCACTCTTGCTTGCAAT TTCCTGCCAAAAATCACACCTAGGACACAGGGTGAGTTCTTTTGTCTTTTCCAGGGAATC GACTAAGTCCCCATATTCGGGGCCTTGACTC</pre>  |
| <b>Restriction Sites:</b>           | NotI-NotI   |
| <b>ACCN:</b>                        | NM_139125   |
| <b>Insert Size:</b>                 | 3750 bp   |
| <b>OTI Disclaimer:</b>              | 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).  |
| <b>Components:</b>                  | 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).  |

|                               |  |
|-------------------------------|--|
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"><li>1. Centrifuge at 5,000xg for 5min.</li><li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li><li>3. Close the tube and incubate for 10 minutes at room temperature.</li><li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li><li>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.</li></ol>  |
| <b>RefSeq:</b>                | <a href="#">NM_139125.2</a> , <a href="#">NP_624302.1</a>  |
| <b>RefSeq Size:</b>           | 4137 bp  |
| <b>RefSeq ORF:</b>            | 2187 bp  |
| <b>Locus ID:</b>              | 5648   |
| <b>UniProt ID:</b>            | <a href="#">P48740</a>   |
| <b>Cytogenetics:</b>          | 3q27.3   |
| <b>Domains:</b>               | CCP, CUB, Tryp_SPc, EGF_CA   |
| <b>Protein Families:</b>      | Druggable Genome, Protease   |
| <b>Protein Pathways:</b>      | Complement and coagulation cascades  |
| <b>Gene Summary:</b>          | <p>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 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]</p> <p>Transcript Variant: This variant (2) differs in the 3' UTR and 3' coding region, compared to variant 1. The encoded isoform (2) is longer and has a distinct C-terminus, compared to isoform 1. This isoform (2) is referred to as MASP3 in the literature.</p> |