



# MASP1 (light chain, Cleaved-Ile449) mouse mAb

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| <b>Catalog No</b>                  | YP-mAb-13781                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Gene Name</b>                   | MASP1 CRARF CRARF1 PRSS5                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Immunogen</b>                   | Synthesized peptide derived from human MASP1 (light chain, Cleaved-Ile449)                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Specificity</b>                 | This antibody detects endogenous levels of Human MASP1 (light chain, Cleaved-Ile449, protein was cleaved amino acid sequence between 448-449 )                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Source</b>                      | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Synonyms</b>                    | MASP1;MASP1 CRARF CRARF1 PRSS5;MASP1 (light chain;Cleaved-Ile449); Mannan-binding lectin serine protease 1 (EC 3.4.21.-;Complement factor MASP-3;Complement-activating component of Ra-reactive factor;Mannose-binding lectin-associated serine protease 1;MASP-1;Mannose-binding protein-associated serine protease;Ra-reactive factor serine protease p100;RaRF; Serine protease 5) [Cleaved into: Mannan-binding lectin serine protease 1 heavy chain;Mannan-binding lectin serine protease 1 light chain]; Cleaved-Ile449) |
| <b>Observed Band</b>               | 20 77kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Calculated Molecular Weight</b> | 20 77kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Cell Pathway</b>                | Secreted .                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Tissue Specificity</b>          | Protein of the plasma which is primarily expressed by liver.                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Function</b>                    | complement activation, lectin pathway, immune effector process, activation of immune response, acute inflammatory response, activation of plasma proteins involved in acute inflammatory response, regulation of acute inflammatory response, negative regulation of immune system process, positive regulation of immune system process, regulation of immune effector process, negative regulation of immune effector process, regulation of humoral immune response,                                                        |



negative regulation of humoral immune response, proteolysis, defense response, inflammatory response, immune response, complement activation, humoral immune response, response to wounding, negative regulation of macromolecule metabolic process, regulation of protein maturation by peptide bond cleavage, negative regulation of protein maturation by peptide bond cleavage, protein processing, regulation of proteolysis, regulation of complement a

## Background

enzyme regulation:Inhibited by SERPING1 and A2M.,function:Functions in the lectin pathway of complement, which performs a key role in innate immunity by recognizing pathogens through patterns of sugar moieties and neutralizing them. The lectin pathway is triggered upon binding of mannan-binding lectin (MBL) and ficolins to sugar moieties which leads to activation of the associated proteases MASP1 and MASP2. Functions as an endopeptidase and may activate MASP2 or C2 or directly activate C3 the key component of complement reaction. Isoform 2 may have an inhibitory effect on the activation of the lectin pathway of complement or may cleave IGFBP5.,PTM:Autoproteolytic processing of the proenzyme produces the active enzyme composed on the heavy and the light chain held together by a disulfide bond. Isoform 1 but not isoform 2 is activated through autoproteolytic processing.,PTM:N-glycosylated. Some N-linked glycan are of the complex-type.,PTM:The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R) stereospecific within EGF domains.,similarity:Belongs to the peptidase S1 family.,similarity:Contains 1 EGF-like domain.,similarity:Contains 1 peptidase S1 domain.,similarity:Contains 2 CUB domains.,similarity:Contains 2 Sushi (CCP/SCR) domains.,subunit:Homodimer. Interacts with the oligomeric lectins MBL2, FCN2 and FCN3; triggers the lectin pathway of complement through activation of C3. Interacts with SERPING1.,tissue specificity:Protein of the plasma which is primarily expressed by liver.,

## matters needing attention

Avoid repeated freezing and thawing!

## Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

## Products Images