



# Cleaved-MASP-1 HC (R448) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-13779
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse;
<b>Applications</b>	WB;ELISA
<b>Gene Name</b>	MASP1
<b>Protein Name</b>	Mannan-binding lectin serine protease 1
<b>Immunogen</b>	The antiserum was produced against synthesized peptide derived from human MASP1. AA range:399-448
<b>Specificity</b>	Cleaved-MASP-1 HC (R448) Polyclonal Antibody detects endogenous levels of fragment of activated MASP-1 HC protein resulting from cleavage adjacent to R448.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	MASP1; CRARF; CRARF1; PRSS5; Mannan-binding lectin serine protease 1; Complement factor MASP-3; Complement-activating component of Ra-reactive factor; Mannose-binding lectin-associated serine protease 1; MASP-1; Mannose-binding protein-asso
<b>Observed Band</b>	47kD
<b>Cell Pathway</b>	Secreted .
<b>Tissue Specificity</b>	Protein of the plasma which is primarily expressed by liver.
<b>Function</b>	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.

## Background

mannan binding lectin serine peptidase 1(MASP1) Homo sapiens 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.[p

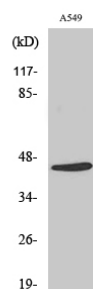
## matters needing attention

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



Western Blot analysis of various cells using  
Cleaved-MASP-1 HC (R448) Polyclonal Antibody



Western blot analysis of lysates from A549 cells,  
treated with etoposide 25uM 24h, using MASP1 (heavy  
chain, Cleaved-Arg448) Antibody. The lane on the right  
is blocked with the synthesized peptide.