Product Name: **Cleaved-MASP-1 HC (R448) Rabbit Polyclonal Antibody**
Catalog #: **APRab09007**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,ELISA
Reactivity	Human,Rat,Mouse
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,ELISA 1:5000-1:20000
Molecular Weight	47kDa

Antigen Information

Gene Name	MASP1
Alternative Names	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
Gene ID	5648.0
SwissProt ID	P48740
Immunogen	The antiserum was produced against synthesized peptide derived from human MASP1. AA range:399-448

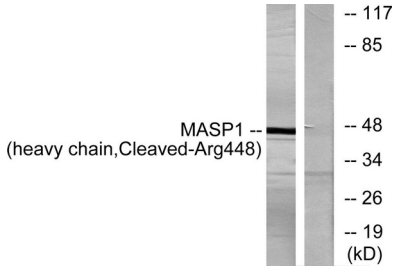
Background

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 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.[penzyme 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.,

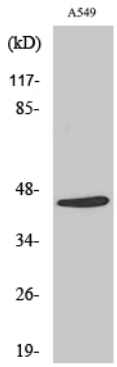
Research Area

Complement and coagulation cascades;

Image Data



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.



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