



Rabbit Anti-MASP2 antibody

SL1980R

Product Name:	MASP2
Chinese Name:	甘露聚糖结合凝集素丝氨酸肽酶2抗体
Alias:	mannan-binding lectin serine peptidase 2; MAP19; MASP-2; Mannose-binding protein-associated serine protease 2; MBL-associated serine protease 2; MASP1P1; sMAP; Small MBL associated protein. (Contains: Mannan-binding lectin serine protease 2 A chain; Mannan-binding lectin serine protease 2 B chain).
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	74kDa
Cellular localization:	Secretory protein
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human MASP2:351-450/686
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	MASP2, MBL associated serine protease 2, is a serum protease that plays an important role in the activation of the complement system via mannose-binding lectin (MBL). Binding of MBL to carbohydrate groups triggers MASP2 activation by auto-catalytic

cleavage which leads to cleavage of C2 and C4, leading to their activation and to the formation of C3 convertase. MASP2 also binds to L-Ficolin and H-Ficolin, and when the complex binds pathogens the MASP is activated. Low MBL levels in serum are associated with increased susceptibility to infection, and an Asp105Gly mutation in MASP2 is associated with low MASP2 levels in serum. Reduced functional levels of MBL are also postulated to be associated with generation of autoantibodies in systemic lupus erythematosus, acting through a decreased clearance of apoptotic material. A truncated form of MASP2 that constitutes the amino 185 residues, Map19 is also a component of the MBL-MASP-1 complex.

Function:

Serum protease that plays an important role in the activation of the complement system via mannose-binding lectin. After activation by auto-catalytic cleavage it cleaves C2 and C4, leading to their activation and to the formation of C3 convertase.

Subunit:

Homodimer; disulfide-linked. Binds MBL2. Isoform 2 binds to MASP1. Binds SERPING1. Dimerization and MBL2 binding requires calcium ions.

Subcellular Location:

Secreted.

Tissue Specificity:

Plasma.

Post-translational modifications:

The iron and 2-oxoglutarate dependent 3-hydroxylation of aspartate and asparagine is (R) stereospecific within EGF domains.

Activated by cleavage after Arg-444. The uncleaved zymogen is inactive towards synthetic substrates, but has sufficient activity to effect autocatalytic cleavage.

DISEASE:

Defects in MASP2 are the cause of MASP2 deficiency (MASPD) [MIM:613791].

MASPD is a disorder that results in autoimmune manifestations, recurrent severe infections, and chronic inflammatory disease.

Similarity:

Belongs to the peptidase S1 family.

Contains 2 CUB domains.

Contains 1 EGF-like domain.

Contains 1 peptidase S1 domain.

Contains 2 Sushi (CCP/SCR) domains.

SWISS:

O00187

Gene ID:
10747

Database links:

[Entrez Gene: 10747](#)Human

[Omim: 605102](#)Human

[SwissProt: O00187](#)Human

[Unigene: 655645](#)Human

Important Note:

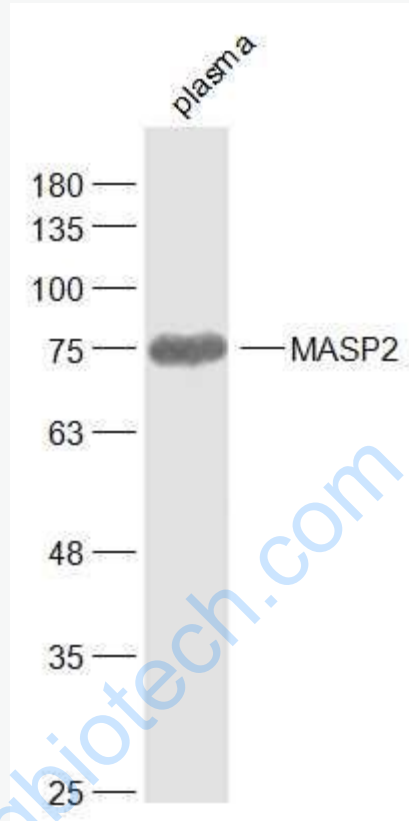
This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

甘露糖结合凝集素(MBL)是补体系统的原有成分,是由肝脏合成的C型凝集素并游离在血清中,也是钙依赖性糖Binding protein。

MBL可识别和结合病原微生物表面的甘露糖、岩藻糖和N-

乙酰葡萄糖胺等糖结构并首先与病原微生物的糖类配体结合,随后构象发生变化,激活与之相关联的MBL相关的丝氨酸蛋白激酶(MASP),两种MASP(MASP1、MASP2)具有与活化的C1s类似的生物学活性,其中MASP2可水解C4和C2分子, MASP1则可直接切割C3,而形成C3转化酶,以至补体顺序激活,这是补体激活的MBL途径,这种补体顺序的被激活在机体的固有性免疫防御中发挥重要作用。

Picture:



Sample:

Plasma(Rat) Lysate at 40 ug

Primary: Anti-MASP2 (SL1980R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 74 kD

Observed band size: 75 kD



Sample:

Lung (Mouse) Lysate at 40 ug

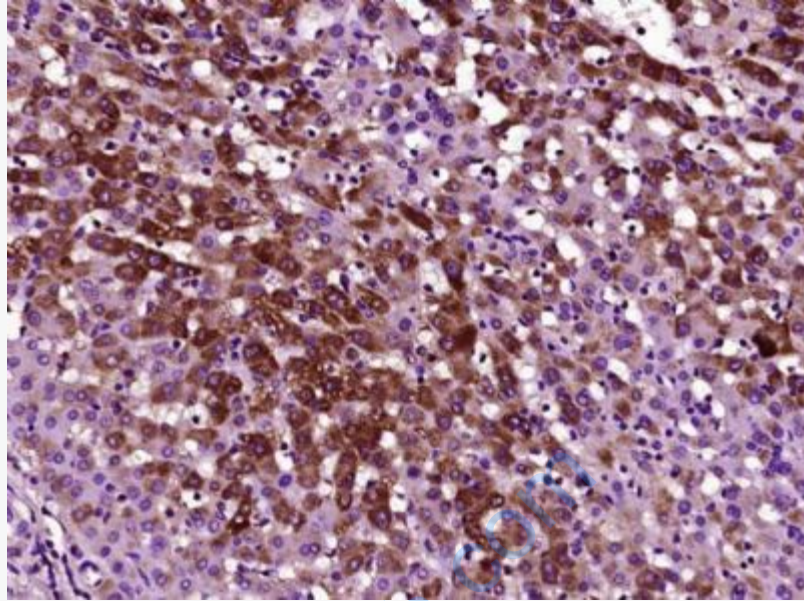
Cerebrum (Mouse) Lysate at 40 ug

Primary: Anti- MASP2 (SL1980R) at 1/300 dilution

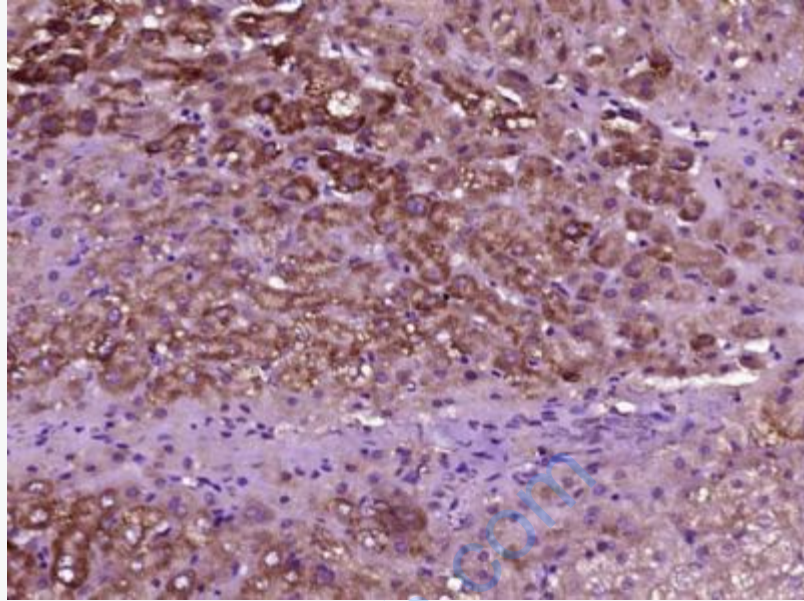
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 74 kD

Observed band size: 74 kD



Paraformaldehyde-fixed, paraffin embedded (Human liver); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MASP2) Polyclonal Antibody, Unconjugated (SL1980R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Human liver carcinoma); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (MASP2) Polyclonal Antibody, Unconjugated (SL1980R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.