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MBL2 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP13736b

Product Information

Application	WB, IF, IHC-P, E
Primary Accession	P11226
Other Accession	NP_000233.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB33717
Calculated MW	26144
Antigen Region	173-202

Additional Information

Gene ID	4153
Other Names	Mannose-binding protein C, MBP-C, Collectin-1, MBP1, Mannan-binding protein, Mannose-binding lectin, MBL2, COLEC1, MBL
Target/Specificity	This MBL2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 173-202 amino acids from the C-terminal region of human MBL2.
Dilution	WB~~1:1000 IF~~1:10~50 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MBL2 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MBL2 (HGNC:6922)
Function	Calcium-dependent lectin, which acts as a pattern recognition receptor that initiates the lectin pathway of the complement system, a cascade of proteins

	that leads to phagocytosis and breakdown of pathogens and signaling that strengthens the adaptive immune system (PubMed:14515269, PubMed:22966085, PubMed:7634089, PubMed:9087411). Specifically recognizes and binds the mannose moiety of carbohydrates on the pathogen surface, activating the MASP1 serine protease and initiating the proteolytic cascade of the lectin complement pathway (PubMed:22966085, PubMed:2573758, PubMed:6643429, PubMed:8082295, PubMed:9087411). Upon SARS coronavirus-2/SARS-CoV-2 infection, activates the complement lectin pathway which leads to the inhibition SARS-CoV-2 infection and a reduction of the induced inflammatory response (PubMed:35102342). May bind DNA (PubMed:15145932).
Cellular Location	Secreted. Cell surface. Note=Specifically binds mannose moiety of carbohydrates on the surface of pathogens.
Tissue Location	Plasma protein produced mainly in the liver.

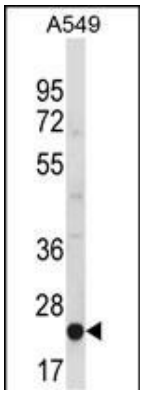
Background

This gene encodes the soluble mannose-binding lectin or mannose-binding protein found in serum. The protein encoded belongs to the collectin family and is an important element in the innate immune system. The protein recognizes mannose and N-acetylglucosamine on many microorganisms, and is capable of activating the classical complement pathway. Deficiencies of this gene have been associated with susceptibility to autoimmune and infectious diseases.

References

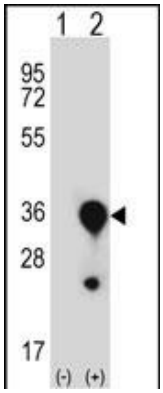
Auriti, C., et al. Hum. Immunol. 71(11):1084-1088(2010)
Fraser, D.A., et al. J. Immunol. 185(7):3932-3939(2010)
de Wit, E., et al. Mamm. Genome (2010) In press :
Filho, R.M., et al. Viral Immunol. 23(4):449-453(2010)
Hu, Y., et al. Viral Immunol. 23(4):443-447(2010)

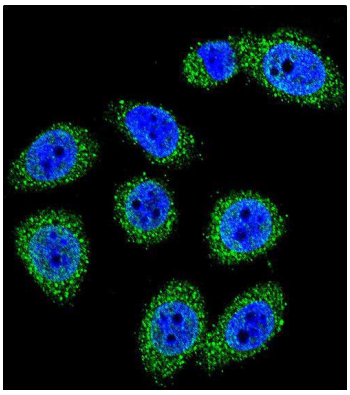
Images



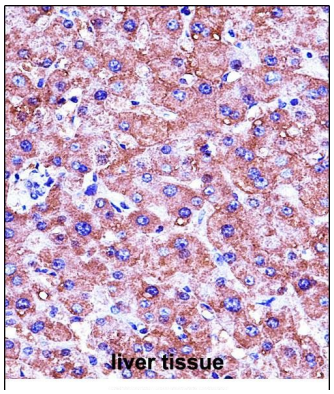
MBL2 Antibody (C-term) (Cat. #AP13736b) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the MBL2 antibody detected the MBL2 protein (arrow).

Western blot analysis of MBL2 (arrow) using rabbit polyclonal MBL2 Antibody (C-term) (Cat. #AP13736b). 293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected (Lane 2) with the MBL2 gene.





Confocal immunofluorescent analysis of MBL2 Antibody (C-term)(Cat#AP13736b) with A549 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).



MBL2 Antibody (C-term) (Cat. #AP13736b)immunohistochemistry analysis in formalin fixed and paraffin embedded human liver tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of MBL2 Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.

Citations

- Derlin-3 Is Required for Changes in ERAD Complex Formation under ER Stress

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