Datasheet for ABIN2191776

anti-MBL-C antibody

1 Image | 4 Publications

Go to Product page

Overview

Quantity:	100 µg
Target:	MBL-C
Reactivity:	Mouse
Host:	Rat
Clonality:	Monoclonal
Conjugate:	This MBL-C antibody is un-conjugated
Application:	Western Blotting (WB), Immunoassay (IA), Immunofluorescence (IF), Flow Cytometry (FACS)

Product Details

Clone:	14D12
Sterility:	0.2 µm filtered

Target Details

Target:	MBL-C
Alternative Name:	Mannose Binding Lectin C (MBL-C Products)
Background:	Mannose binding lectin (MBL), also called mannose- or mannan-binding protein (MBP), is a member of the group of collectins. MBL is an important pattern-recognition receptor in the innate immune system. The protein mediates innate immune responses, such as activation of the complement lectin pathway and phagocytosis, to help fight infections. MBL is an oligomeric lectin that recognizes carbohydrates as mannose and N-acetylglucosamine on pathogens. MBL contains a cysteine rich, a collagen like and a carbohydrate recognition domain. Binding of MBL

Target Details

	leads to the activation of MBL- associated serine proteases (MASP's). Activated MASP-2 cleaves C4 and C2 in a similar way as C1s do for the classical pathway (CP) leading to the formation of C4b2a, cleavage of the classical pathway convertase C3, and eventually complement activation up to the formation of the membrane attack complex. MBL is able to activate the complement pathway independent of the classical and alternative complement activation pathways. MBL is predominantly synthesized by hepatocytes and has been isolated from the liver or serum of several vertebrate species. Only one form of human MBL has been characterized, while two forms are found in rhesus monkeys, rabbits, rats and mice. The mouse forms are known as MBL-A and MBL-C. The MBL-C concentrations in serum are about 6-fold compared to that of MBL-A. MBL-A, but not MBL-C, was found to be an acute phase protein in casein and LPS-injection models. MBL-C exists in higher oligomeric forms than MBL-A. The monoclonal antibody 14D12 is a calcium-dependent antibody. Aliases MBL, L-MB, MBL-C, MBP-C, Mbl2 Immunogen Purified MBL-C

Application Details

Application Notes:	For immunohistochemistry and Western blotting, dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. It is recommended that solutions with a calcium concentration of 1 mM are used (14D12 is a calcium- dependent antibody). Positive Mouse serum, Kidney tissue control
Restrictions:	For Research Use only

Handling

Buffer:	PBS, containing 0.1 % bovine serum albumin and 0.02 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Product should be stored at 4 °C. Under recommended storage conditions, product is stable for at least one year. The exact expiry date is indicated on the label.

Publications

Product cited in:	Kuligowski, Kwan, Lo, Wong, James, Bourges, Ooi, Abeynaike, Hall, Kitching, Hickey: " Antimyeloperoxidase antibodies rapidly induce alpha-4-integrin-dependent glomerular

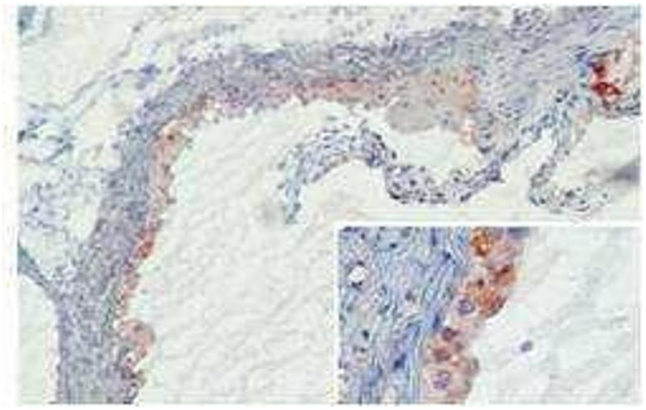
Publications

neutrophil adhesion." in: **Blood**, Vol. 113, Issue 25, pp. 6485-94, (2009) (PubMed).

Kneilling, Mailhammer, Hültner, Schönberger, Fuchs, Schaller, Bukala, Massberg, Sander, Braumüller, Eichner, Maier, Hallmann, Pichler, Haubner, Gawaz, Pfeffer, Biedermann, Röcken: " Direct crosstalk between mast cell-TNF and TNFR1-expressing endothelia mediates local tissue inflammation." in: **Blood**, Vol. 114, Issue 8, pp. 1696-706, (2009) (PubMed).

Vajkoczy, Laschinger, Engelhardt: "Alpha4-integrin-VCAM-1 binding mediates G protein-independent capture of encephalitogenic T cell blasts to CNS white matter microvessels." in: **The Journal of clinical investigation**, Vol. 108, Issue 4, pp. 557-65, (2001) (PubMed).

Images



Immunohistochemistry

Image 1. MBL-C (clone 14D12) deposition in developing murine atherosclerotic lesions following 10 weeks of high fat feeding. MBL-C was detected in and around invading macrophages invading the intima (insert). MBL-C bound, similar to MBL-A, at sites of necrosis (upper right corner). No MBL-C binding was shown in the media or on fibrous caps covering the thickened intima.