abcam

Product datasheet

Anti-Mannose Receptor antibody [15-2] ab8918

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Overview

Product name Anti-Mannose Receptor antibody [15-2]

Description Mouse monoclonal [15-2] to Mannose Receptor

Host species Mouse

Tested applications Suitable for: IHC-Fr

Unsuitable for: IHC-P

Species reactivity Reacts with: Human

Immunogen Purified human mannose receptor from human placental tissue.

Epitope Stains extracellular domain of Mannose Receptor.

Positive control Macrophages IHC: liver endothelial cells and Kupffer cells, spermatids, spermatozoa

General notes The Mannose Receptor (MR), a member of the vertebrate C-type lectin family, is a pattern

recognition receptor that is involved in both innate and adaptive immunity. The 180 kDa transmembrane protein consists of 5 domains: an amino-terminal cysteine-rich region, a fibronectin type II repeat, a series of eight tandem lectin-like carbohydrate recognition domains (responsible for the recognition of mannose and fucose), a transmembrane domain, and an intracellular carboxy-terminal tail. The structure is shared by the family of multi lectin mannose receptors: the phospholipase A2-receptor, DEC 205 and the novel C-type lectin receptor (mannose receptor X). The MR recognises a wide range of gram positive and gram negative bacteria, yeasts, parasites and mycobacteria. The MR has also been shown to bind and internalize tissue-type plasminogen activator. MR's are present on monocytes and dendritic cells (DC) and are presumed to play a role in innate and adaptive immunity, the latter via processing by DC. The expression of MR as observed in immunohistology is present on tissue macrophages, dendritic cells, a subpopulation of endothelial cells, Kupffer cells and sperm cells.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

1

Form Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

Storage buffer Constituents: PBS, 0.1% BSA

Purity Protein G purified

Purification notes 0.2 μm filtered antibody solution

Primary antibody notes The Mannose Receptor (MR), a member of the vertebrate C-type lectin family, is a pattern

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dendritic cells, a subpopulation of endothelial cells, Kupffer cells and sperm cells.

Clonality Monoclonal

Clone number 15-2

Myeloma unknown lsotype lgG1

Light chain type unknown

Applications

The Abpromise guarantee Our Abpromise guarantee covers the use of ab8918 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-Fr	**** <u>(6)</u>	1/50.

Application notes Is unsuitable for IHC-P.

Target

Function Mediates the endocytosis of glycoproteins by macrophages. Binds both sulfated and non-sulfated

polysaccharide chains. Acts as phagocytic receptor for bacteria, fungi and other pathogens.

Sequence similaritiesContains 8 C-type lectin domains.

Contains 1 fibronectin type-II domain. Contains 1 ricin B-type lectin domain.

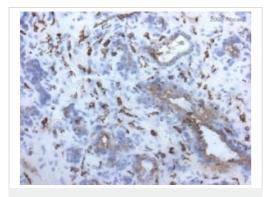
Cellular localization Membrane.

Images



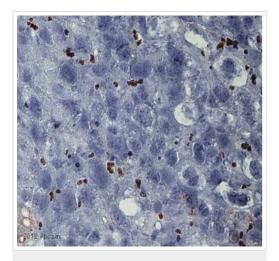
Immunohistochemistry (Frozen sections) - Anti-Mannose Receptor antibody [15-2] (ab8918)

Frozen sections of human tonsil. ab8918 was used in a dilution of 1/25 and shows staining of endothelia of lymph vessels.



Immunohistochemistry (Frozen sections) - Anti-Mannose Receptor antibody [15-2] (ab8918) This image is a courtesy of Pat Bell

ab8918 staining Mannose Receptor in human mammary gland tissue section by Immunohistochemistry (Frozen sections). Tissue samples were fixed with 70% Ethanol and blocking for 10 minutes at RT was performed. The sample was incubated with primary antibody (1/10) for 1 hour. A HRP-conjugated mouse polyclonal to mouse IgG was used undiluted as secondary antibody.

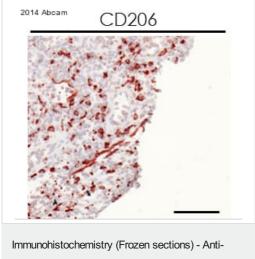


Immunohistochemistry (Frozen sections) - Anti-Mannose Receptor antibody [15-2] (ab8918)

This image is courtesy of an anonymous Abreview

Immunohistochemical analysis of murine uterus tissue sections, staining Mannose Receptor with ab8918.

Tissue was fixed with paraformaldehyde and blocked with 3% BSA for 30 minutes at room temperature. Samples were incubated with primary antibody (1/40 in 1% BSA) for 1.5 hours. An undiluted HRP-conjugated rabbit anti-mouse polyclonal IgG was used as the secondary antibody.



ab8918 staining Mannose Receptor in human endometriosis tissue sections by Immunohistochemistry (IHC-Fr - frozen sections). Tissue was fixed with acetone and blocked with 10% serum for 1 hour at 22°C. Samples were incubated with primary antibody (1/10 in PBS + 1% NGS) for 16 hours at 4°C. An undiluted HRP-conjugated goat anti-mouse IgG polyclonal was used as the secondary antibody.

Immunonistochemistry (Frozen sections) - Anti-Mannose Receptor antibody [15-2] (ab8918)

This image is courtesy of an Abreview submitted by Aimée-Lys Rusesabagina

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