Datasheet for ABIN2191922

anti-Mannose Receptor antibody (Biotin)

1 Publication

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Overview

Quantity:	50 µg
Target:	Mannose Receptor (MR)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Mannose Receptor antibody is conjugated to Biotin
Application:	Flow Cytometry (FACS), Western Blotting (WB), Functional Studies (Func)

Product Details

Clone:	15-2
Isotype:	IgG1
Cross-Reactivity (Details):	Cross reactivity: : No,t tested
Sterility:	0.2 µm filtered

Target Details

Target:	Mannose Receptor (MR)
Alternative Name:	Mannose Receptor, CD206 (MR Products)
Background:	The monoclonal antibody 15-2 recognizes the mannose receptor (MR), also known as CD206, a member of the vertebrate C-type lectin family. The mannose receptor, is a pattern recognition receptor that is involved in both innate and adaptive immunity. The 175 kDa single-pass type I transmembrane receptor consists of 5 domains: an amino-terminal cysteine-rich region, a

Target Details

	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 binds high-mannose structures on 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 expression of MR on monocytes increases during culture and can be enhanced by cytokines as IFN-gamma. Labeling of MR expressing monocytes/macrophages increases with prolonged incubation time probably due to internalization of the MR-antibody-complex. The monoclonal antibody 15-2 prevents binding of glycoproteins including t-PA to MR. Detection of the MR with anti-MR monoclonal antibody 15-2 can substitute staining for mannose containing probes as labeled mannosylated BSA, a technique which is more cumbersome and less specific. Aliases MRC1, CLEC13D, MMR Immunogen Purified human mannose receptor from human placental tissue

Application Details

Application Notes:	For immunohistochemistry, flow cytometry 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. The typical starting working dilution is 1:50. For functional studies, in vitro dilutions have to be optimized in user's experimental setting. Positive Macrophages control Negative Lymphocytes, Monocytes control
Restrictions:	For Research Use only

Handling

Buffer:	PBS, containing 0.02 % sodium azide and 0.1 % bovine serum albumin.
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

Handling

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:	Bax, Siersema, Haringsma, Kuipers, Vos, Van Dekken, Van Vliet, Kusters: "High-grade dysplasia in Barrett's esophagus is associated with increased expression of calgranulin A and B." in: **Scandinavian journal of gastroenterology**, Vol. 42, Issue 8, pp. 902-10, (2007) (PubMed).