

Product datasheet for **SM1829B**

Mannose Receptor (MRC1) Mouse Monoclonal Antibody [Clone ID: 15-2]

Product data:

Product Type:	Primary Antibodies
Clone Name:	15-2
Applications:	FN, IHC, WB
Recommended Dilution:	Western blot (1,2): A non-reduced sample treatment and 6% SDS-Page was used. The band size is 175 kDa (Ref.1): The typical starting working dilution is 1:10. Flow cytometry (2): Antibody 15-2 stains the extracellular domain of MR: The typical starting working dilution is 1:10. Functional assays (1): Functions as an inhibitor of binding. The antibody was functionally tested by preincubation of immobilized receptor with antibody. This prevented binding of t-PA to immobilized receptor. (Ref.1). Immunohistochemistry on frozen sections (1,2,3): Tissue sections were fixed in acetone/chloroform. Sections were preincubated with normal rabbit serum (Ref.3). The typical starting working dilution is 1:10. Positive control: Macrophages. Negative control: Lymphocytes and Monocytes. Does not work in Immunohistochemistry on paraffin sections.
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Immunogen:	Purified human mannose receptor from human placental tissue
Specificity:	The monoclonal antibody 15-2 recognizes the mannose receptor (MR), also known as CD206, a member of the vertebrate C-type lectin family. 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.



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Formulation:	PBS Label: Biotin State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% bovine serum albumin Preservative: 0.02% sodium azid
Concentration:	lot specific
Purification:	Protein G
Conjugation:	Biotin
Storage:	Store at 2 - 8 °C.
Stability:	Shelf life: one year from despatch.
Gene Name:	mannose receptor, C type 1
Database Link:	Entrez Gene 4360 Human P22897
Background:	<p>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 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.</p> <p>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.</p>
Synonyms:	Macrophage mannose receptor, CLEC13D, CLEC13DL, MRC1L1