

Mouse Anti-Human MRC1/CD206/Mannose Receptor Clone 15-2 Biotin mAb

Catalog No. MON2073B **Quantity:** 50 µg

Description: 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 recognizes 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-γ. Labeling of MR expressing monocytes/macrophages increases at 37°C with prolonged incubation time probably due to internalization of the MR-antibody-complex. The antibody prevents binding of glycoproteins including t-PA to MR. Detection of the MR with anti-MR monoclonal antibody can substitute staining for mannose containing probes as labeled mannosylated BSA, a technique which is more cumbersome and less specific.

Host: Mouse

Isotype: IgG1

Clone: 15-2

Purification: 1 ml (100 µg/ml) purified antibody solution in PBS containing 0.1% BSA and 0.02% sodium azide.

Applications: The antibody can be used for histology on frozen sections, flow cytometry, immunoassays and Western blot.

Application Notes: For immunohistology, 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 1:10.

Storage & Stability: Store antibody at 4°C. Under recommended storage conditions, product is stable for one year.

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