

Pacific Blue™ anti-human CD206 (MMR)

Catalog # / Size: 2205755 / 25 tests
2205760 / 100 tests

Clone: 15-2

Isotype: Mouse IgG1, κ

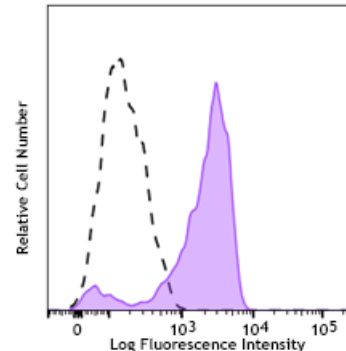
Immunogen: Purified human mannose receptor

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with Pacific Blue™ under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA)

Concentration: Lot-specific



Human peripheral blood monocytes were stimulated with GM-CSF for 3 days, then stained with CD206 (MMR) (clone 15-2) Pacific Blue™ (filled histogram), or mouse IgG1, κ Pacific Blue™ isotype control (open histogram).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 µL per million cells in 100 µL staining volume or 5 µL per 100 µL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

Application Notes: The 15-2 antibody blocks the interaction of MMR with its ligand, and inhibits mannose receptor-mediated degradation of t-PA by macrophages. Additional reported applications of this antibody (for the relevant formats) include: Western blotting¹, blocking of ligand binding^{1,2}, immunofluorescence³, and immunohistochemical staining of acetone-fixed frozen tissue sections¹.

Application References:

1. Noorman F, *et al.* 1997. *J. Leukocyte Biol.* 61:63. (WB, IHC, Block)
2. Barrett-Bergshoeff M, *et al.* 1997. *Thromb Haemost.* 77:718. (Block)
3. Kato M, *et al.* 2007. *J. Immunol.* 179:6052. (IF)

Description: Macrophage mannose receptor (MMR) is a 162-175 kD type I membrane protein also known as CD206, MRC1, or mannose receptor (MR). It is a pattern recognition receptor (PRR) that belongs to C-type lectin superfamily. MMR is expressed on macrophages, dendritic cells, and hepatic or lymphatic endothelial cells, but not on monocytes. MMR recognizes a range of microbial carbohydrates bearing mannose, fucose, or N-acetyl glucosamine. MMR mediates endocytosis and phagocytosis, induces activation of macrophages and antigen presentation, plays an important role in host defense, and provides a link between innate and adaptive immunity.

- Antigen References:**
1. Mason D, *et al.* Eds. 2002. Leukocyte Typing VII. Oxford University Press. p303
 2. Wileman TE, *et al.* 1986. *P. Natl. Acad. Sci. USA* 83:2501.
 3. Apostolopoulos V and McKenzie IF. 2001. *Curr. Mol. Med.* 1:469.
 4. Le Cabec V, *et al.* 2005. *J. Leukocyte Biol.* 77:934.
 5. Barrett-Bergshoeff M, *et al.* 1997. *Thromb. Haemostasis* 77:718.