SONY

# Product Data Sheet

## Brilliant Violet 711™ anti-human CD206 (MMR)

**Catalog # / Size:** 2205680 / 100 tests
2205675 / 25 tests

**Clone:** 15-2

**Isotype:** Mouse IgG1, κ

**Immunogen:** Purified human mannose receptor

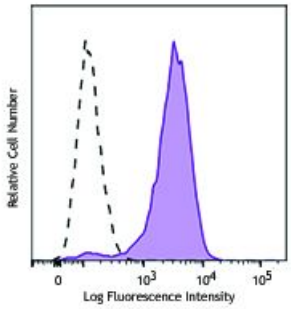
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 711™ under optimal conditions.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

**Workshop Number:** HCDM listed

**Concentration:** Lot-specific



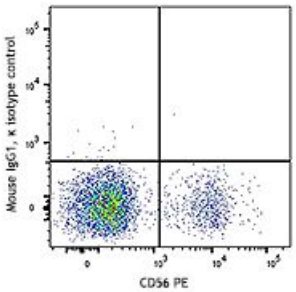

GM-CSF-stimulated (3 days) human peripheral blood monocytes were stained with CD206 (clone 15-2) Brilliant Violet 711™ (filled histogram) or mouse IgG1, κ Brilliant Violet 711™ isotype control (open histogram).

## 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 or 5 µl per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 711™ excites at 405 nm and emits at 711 nm. The bandpass filter 710/50 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 711™ is a trademark of Sirigen Group Ltd.

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**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. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 321112).

**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)


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**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. Haemostatis* 77:718.



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