Alexa Fluor® 488 anti-mouse CD206 (MMR)

Catalog # / Size: 1308550 / 100 μg

1308545 / 25 μg

Clone: C068C2

Isotype: Rat IgG2a, κ

Immunogen: Recombinant mouse CD206 (MMR)

Reactivity: Mouse

Preparation: The antibody was purified by affinity

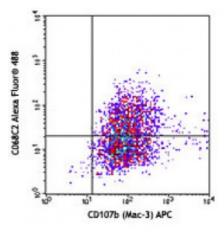
chromatography, and conjugated with Alexa Fluor® 488 under optimal

conditions.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: 0.5



Thioglycollate-elicited BALB/c peritoneal macrophages were surface stained with CD107b (Mac-3) APC, and then intracellularly stained with CD206 (clone C068C2) Alexa Fluor® 488 (top) or rat IgG2a, κ Alexa Fluor® 488 isotype control (bottom).

Applications:

Applications: Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by intracellular immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤1.0 microg per million cells in 100 microL volume. For

immunohistochemistry on frozen tissue

sections, a concentration range of 2.5-5 microg/ml is suggested. For immunofluorescence microscopy, a concentration range of 2.5-10 microg/ml

is recommended. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at

488 nm.

Application Notes:

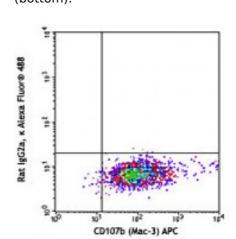
Clone C068C2 recognizes a region similar to clone MR5D3, based on the ability of the clones to block each other.

Application References:

1. Keller J. et al. 2012. Biochem Biophys Res Commun. 417:217. PubMed

2. Ito H, et al. 2012. J Am Soc Nephrol. 23:1797. PubMed

3. Yang X, et al. 2015. PNAS. 112:2900. PubMed



Description:

CD206, also known as mannose receptor (MR), is a 175 kD type I membrane protein. It is a pattern recognition receptor (PRR) belonging to the C-type lectin superfamily. MR is expressed on macrophages, dendritic cells, Langerhans cells, and hepatic or lymphatic endothelial cells. MR recognizes a range of microbial carbohydrates bearing mannose, fucose, or N-acetyl glucosamine through its C-type lectin-like carbohydrate recognition domains, sulfated carbohydrate antigens through its cysteine-rich domain, and collagens through its fibronectin type II domain. MR mediates endocytosis and phagocytosis as well as activation of macrophages and antigen presentation. It plays an important role in host defense and provides a link between innate and adaptive immunity. Recently, MR on lymphatic endothelial cells was found to be involved in leukocyte trafficking and a contributor to the metastatic behavior of cancer cells. It suggests that MR may be a potential target in controlling inflammation and cancer metastasis by targeting the lymphatic vasculature.

Antigen References:

- 1. Wileman TE, et al. 1986. P. Natl. Acad. Sci. USA 83:2501.
- 2. Apostolopoulos V, et al. 2001. Curr. Mol. Med. 1:469.
- 3. Burgdorf S, et al. 2006. J. Immunol. 176:6770.
- 4. McKenzie