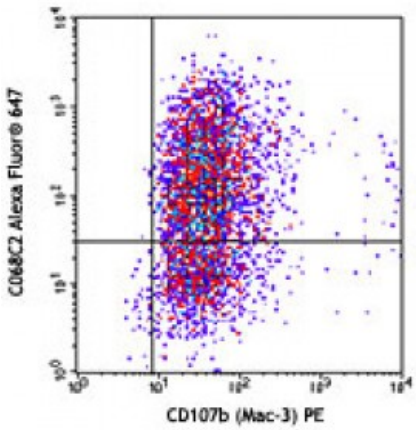
SONY

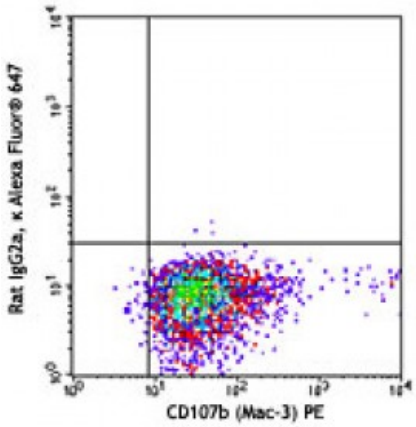
Product Data Sheet

Alexa Fluor® 647 anti-mouse CD206 (MMR)

Catalog # / Size:	1308560 / 100 µg 1308555 / 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® 647 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) PE, and then intracellularly stained with CD206 (clone C068C2) Alexa Fluor® 647 (top) or rat IgG2a, κ Alexa Fluor® 647 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 ≤0.5 microg per million cells in 100 microL volume. For immunohistochemistry, 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® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 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. Put S, *et al.* 2013. *J Nucl Med.* 54:807. PubMed
4. Tang EH, *et al.* 2015. *J Lipid Res.* 56:358. 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