

Alexa Fluor® 647 anti-mouse CD204

Catalog # / Size: 1373595 / 25 µg
1373600 / 100 µg

Clone: 1F8C33

Isotype: Rat IgG2a

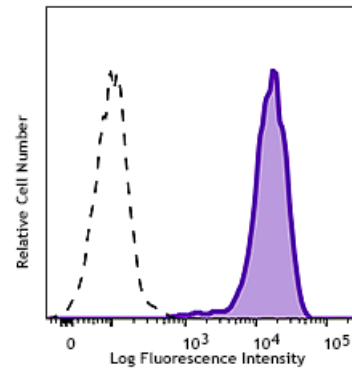
Immunogen: Recombinant mouse CD204 extracellular domain

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 mg/mL



Mouse leukemic monocyte-macrophage cell line RAW267.4 was stained with Alexa Fluor™ 647 anti-mouse CD204 (clone 1F8C33) (filled histogram) or Alexa Fluor 647 rat IgG2a, κ 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 ≤ 0.25 µg per million cells in 100 µL volume. 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: This clone has minimal recognition of CD204 in C57BL/6.

Description: CD204, also known as scavenger receptor A (SR-A) and the macrophage scavenger receptor (MSR), is 220 kDa, trimeric type II transmembrane protein, with one scavenger receptor cysteine-rich domain (SRCR). It is a phagocytic pattern-recognition receptor (PRR) expressed on macrophages and dendritic cells. CD204 is a receptor mediating recognition and internalization of low-density lipoprotein (LDL) by macrophages and plays a critical role in atherogenesis. CD204 also recognizes apoptotic cells, modified lipid proteins, and exogenous pathogen-associated molecular patterns (PAMPs), which results in the induction of innate immune and inflammatory responses. CD204 can act as a co-receptor for Toll-like receptors, such as TLR3, TLR4, or TLR9, to facilitate the expression of proinflammatory cytokines. CD204 has been implicated in several pathological processes such as Alzheimer’s disease, sepsis, ischemic injury, and coronary artery disease.

Antigen
References:

1. Shichita T, *et al.* 2017. *Nat Med.* 23:723.
2. Muczynski V, *et al.* 2017. *Blood.* 129:2443.
3. Iftakhar-E-Khuda I, *et al.* 2016. *Proc Natl Acad Sci U S A.* 113:10643.
4. Nellimarla S, *et al.* 2015. *J Immunol.* 195:3858.
5. Bonilla DL, *et al.* 2013. *Immunity.* 39:537.