

Alexa Fluor® 647 anti-mouse CD169 (Siglec-1)

Catalog # / Size: 1312035 / 25 µg
1312040 / 100 µg

Clone: 3D6.112

Isotype: Rat IgG2a, κ

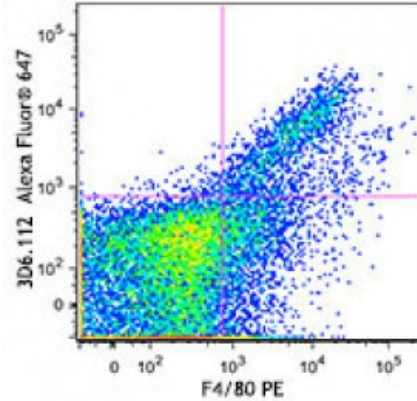
Immunogen: Purified Native Sialoadhesin from spleen

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: Lot-specific

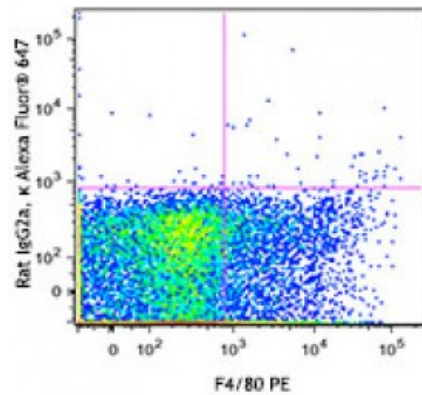


C57BL/6 mouse bone marrow cells were stained with F4/80 PE, Ly-6G FITC and CD169 (clone 3D6.112) Alexa Fluor® 647 (top) or rat IgG2a, κ Alexa Fluor® 647 isotype control (bottom). Data were analyzed by gating on Ly-6G^{dim/neg} cell p

Applications:

Applications: Immunofluorescence

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 microg per million cells in 100 microL volume. For immunohistochemistry, a concentration range of 1-5 µg/ml is suggested. 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: Additional reported applications (for the relevant formats) include: immunohistochemical staining in frozen tissue sections¹ and immunofluorescence microscopy^{1,2}.

Application References: 1. Barral P, *et al.* 2010. *Nat. Immunol.* 11:303. (IHC, IF)
2. Chtanova T, *et al.* 2008. *Immunity* 29:487. (IF)
3. Klass M, *et al.* 2012. *J. Immunol.* 189:2414. [PubMed](#)

Description: CD169, also known as Siglec-1 and Sialoadhesin (Sn), is a type I lectin containing 17 immunoglobulin (Ig) domains (one variable domain and 16 constant domains).

CD169 binds to sialic acids, which can be found on PSGL-1, CD43, CD206, and CD227. By its affinity to α 2, 3-linked sialic acid, it is involved in macrophage binding to different cell types such as granulocytes, monocytes, NK, B, and T cells. CD169 was initially identified as a sialic acid-dependent sheep erythrocyte receptor (SER) on resident bone marrow cells of mice. It has been identified as highly expressed on resident bone marrow macrophages which plays an important role in retention of stem cells in mesenchymal stem cell niche. It is also found on some specific subsets of tissue macrophages in spleen, lymph nodes, bone marrow, liver, colon, lungs, and cancer cells. Evidence suggest that CD169-positive macrophages serve as lymph node-resident APCs to dominate early activation of tumor antigen-specific CD8⁺ T cells and invariant NK cell.

**Antigen
References:**

1. Chow A, *et al.* 2011. *J. Exp. Med.* 208:261.
2. Asano K, *et al.* 2011. *Immunity* 34:85.
3. Xiong YS, *et al.* 2009. *Clin. Biochem.* 42:1057.
4. Varki A, *et al.* 2009. *Glyco*