SONY

Product Data Sheet

PE/Dazzle™ 594 anti-mouse CD169 (Siglec-1)

Catalog # / Size: 1312115 / 25 µg
1312120 / 100 µg

Clone: 3D6.112

Isotype: Rat IgG2a, κ

Immunogen: Purified Native Sialoadhesin from spleen

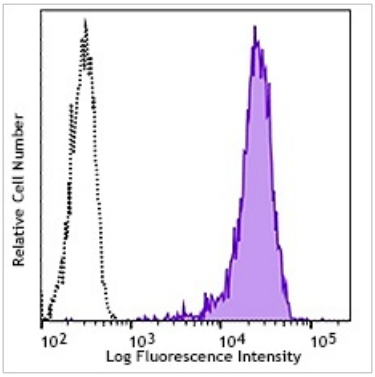
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Workshop Number: VII 70322

Concentration: 0.2



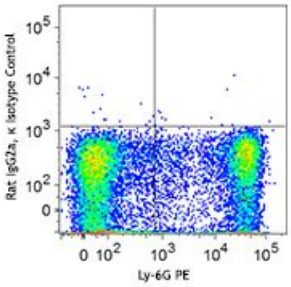
C57BL/6 mouse bone marrow cells were stained with Ly-6G FITC and CD169 (clone 3D6.112) PE/Dazzle™ 594 (left panel) or rat IgG2a, κ PE/Dazzle™ 594 isotype control (right).

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 ≤0.125 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.



Application Notes: Additional reported applications (for the relevant formats) include: immunohistochemical staining in frozen tissue sections[1] and immunofluorescence microscopy[1,2].

Application References:

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

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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 α2, 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. *Glycoconj. J.* 26:231.
5. Rempel H, *et al.* 2008. *PLoS One* 3:e1967.
6. Crocker PR, *et al.* 2001. *Trends Immunol.* 22:337.
7. Hartnell A, *et al.* 2001. *Blood* 97:288.
8. Crocker PR, *et al.* 1985. *J. Exp. Med.* 162:993.

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