SONY

Product Data Sheet

PE/Cy7 anti-mouse CD169 (Siglec-1)

Catalog # / Size: 1312060 / 100 µg
1312055 / 25 µg

Clone: 3D6.112

Isotype: Rat IgG2a, κ

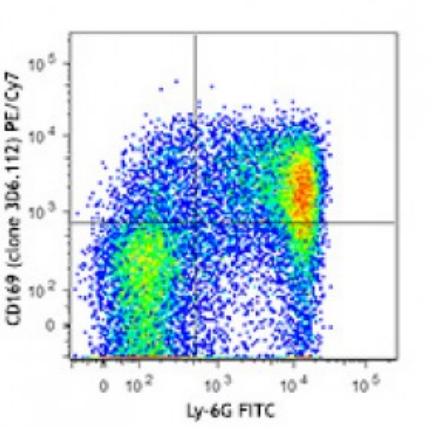
Immunogen: Purified Native Sialoadhesin from spleen

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with PE/Cy7 under optimal conditions. The solution is free of unconjugated PE/Cy7 and unconjugated antibody.

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

Concentration: 0.2



C57BL/6 mouse bone marrow cells were stained with Ly-6G FITC and CD169 (clone 3D6.112) PE/Cy7 (top) or rat IgG2a, κ PE/Cy7 isotype control (bottom). Data shown was gated on total cell population.

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 ≤0.5 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

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, 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 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. *Glyco*