## **Product Data Sheet**

## PE anti-mouse CD169 (Siglec-1)

Catalog # / Size: 1312020 / 100 μg

1312015 / 25 μg

Clone: 3D6.112 Isotype: Rat IgG2a, κ

Immunogen: Purified Native Sialoadhesin from spleen

Reactivity: Mouse

**Preparation:** The antibody was purified by affinity

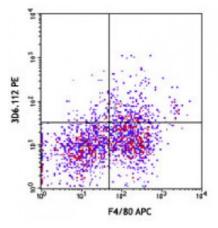
chromatography and conjugated with PE under optimal conditions. The solution is free of unconjugated PE and

unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide.

Concentration: NULL



C57BL/6 splenocytes were stained with F4/80 APC, Ly-6G PerCP, and CD169 (clone 3D6.112) PE (top) or rat IgG2a, κ PE isotype control (bottom). Data was analyzed by gating on Ly-6G-negative cell population.

## **Applications:**

**Applications:** Flow Cytometry, Immunohistochemistry

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:

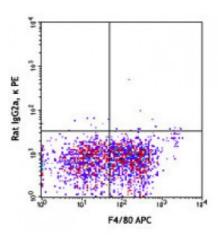
Additional reported applications (for the

relevant formats) include:

immunohistochemical staining in frozen

tissue sections<sup>1</sup> and

immunofluorescence microscopy<sup>1,2</sup>.



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  $\alpha 2$ , 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<sup>+</sup> 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