SONY

Product Data Sheet

Brilliant Violet 605™ anti-mouse CD169 (Siglec-1)

Catalog # / Size: 1312065 / 50 µg

Clone: 3D6.112

Isotype: Rat IgG2a, κ

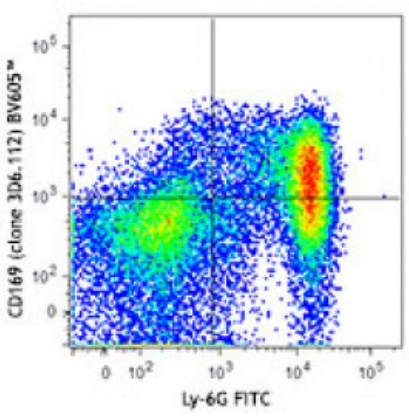
Immunogen: Purified Native Sialoadhesin from spleen

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 605™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 605™ and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

Concentration: 0.2



C57BL/6 mouse bone marrow cells were stained with Ly-6G FITC and CD169 (clone 3D6.112) Brilliant Violet 605™ (top) or rat IgG2a, κ Brilliant Violet 605™ (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 ≤1.0 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 605™ excites at 405 nm and emits at 603 nm. The bandpass filter 610/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 605™ is a trademark of Sirigen Group Ltd.

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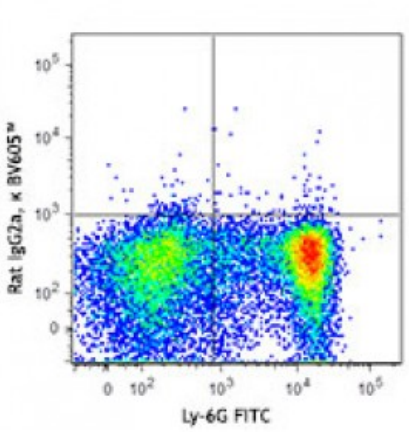

resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.

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*