SONY

Product Data Sheet

PE/Dazzle™ 594 anti-mouse CD170 (Siglec-F)

Catalog # / Size: 1377650 / 100 µg
1377645 / 25 µg

Clone: S17007L

Isotype: Rat IgG2a, κ

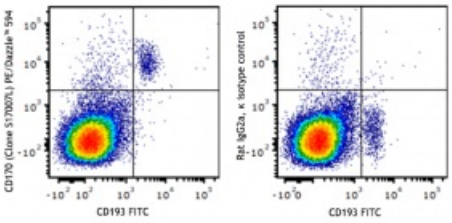
Immunogen: Recombinant mouse CD163 extracellular domain

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

Concentration: 0.2 mg/mL



C57BL/6 mouse splenocytes were stained with anti-mouse CD193 (CCR3) (clone J073E5) FITC and anti-mouse CD170 (Siglec-F) (clone S17007L) PE/Dazzle™594 (left) 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 ≤ 0.25 µg per million cells in 100 µL 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: immunoprecipitation[1], *in vitro* costimulation of T and NK cells[1], *in vitro* blocking of allogeneic mixed leukocyte response and inhibition of MHC-unrestricted CTL cytotoxicity[3,4], *in vitro* induction of thymocyte differentiation[2,5-9,11], and immunohistochemical staining of acetone-fixed frozen sections. For *in vivo* studies or highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Endotoxin < 0.01 EU/µg, Azide-Free, 0.2 µm filtered) (Cat. No. 102116).

Application References:

1. Gross JA, *et al.* 1992. *J. Immunol.* 149:380. (IP, Costim)
2. Cibotti R, *et al.* 1997. *Immunity* 6:245. (Costim)
3. Masten BJ, *et al.* 1997. *Am. J. Respir. Cell Mol. Biol.* 16:335. (Block)
4. Nishio M, *et al.* 1996. *J. Immunol.* 157:4347. (Block)
5. Zhang N and He Y-W, 2005. *J. Exp. Med.* 202:395. (Costim)
6. Terrazas LI, *et al.* 2005. *Intl. J. Parasitology.* 35:1349. (Costim)
7. Perchonock CE, *et al.* 2006. *Mol Cell Biol.* 26(16):6005. (Costim)
8. Wang W, *et al.* 2007. *J. Immunol.* 178:4885. (Costim)
9. Pua HH, *et al.* 2007. *J. Exp. Med.* 204:25. (Costim)
10. Perchonock CE, *et al.* 2007. *J. Immunol.* 179:1768.
11. Barbi J, *et al.* 2007. *Blood* 110:2215.
12. Milpied P, *et al.* 2011. *Blood* 118:2993. PubMed
13. Cunningham NR, *et al.* 2011. *Int Immunol.* 23:693. PubMed
14. Crispin JC, *et al.* 2012. *J. Immunol.* 188:3567. PubMed
15. Li CR, *et al.* 2014. *J Immunol.* 192:1425. PubMed
16. Blankenhaus B, *et al.* 2014. *PLoS Pathog.* 10:1003913. PubMed

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Description: CD170, also known as Siglec-F, Siglec-5, is a member of the Sialic acid-binding Ig-like lectin family, type I single pass transmembrane protein, with 4 extracellular Ig-like domains and 2 ITIM motifs in the cytoplasmic domain; preferentially binds [alpha]-2,3-linked sialic acid. Siglec F is expressed in eosinophils, alveolar macrophages and intestinal microfold (M) cells and induces apoptosis of the lung eosinophis during allergic asthma.

Antigen References:

1. Gicheva N, *et al.* 2016. *Biochem. Biophys. Res. Commun.* 479:1.
2. Kiwamoto T, *et al.* 2015. *J. Allergy Clin. Immunol.* 135:1329.
3. Suzukawa M, *et al.* 2013. *J. Immunol.* 190:5939.
4. Patnode ML, *et al.* 2013. *J. Biol. Chem.* 288:26533.