APC anti-human CD158e1 (KIR3DL1, NKB1)

Catalog # / Size: 2163575 / 25 tests

2163580 / 100 tests

Clone: DX9

Isotype: Mouse IgG1, κ

Immunogen: Human NK cell clone VL186-1.6

Reactivity: Human

Preparation: The antibody was purified by affinity

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

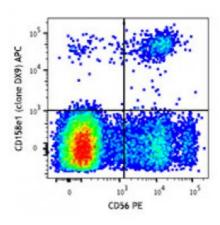
unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2,

containing 0.09% sodium azide and

0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CD56 PE and CD158e1 (clone DX9) APC (top) or mouse IgG1 APC isotype control (bottom).

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 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for

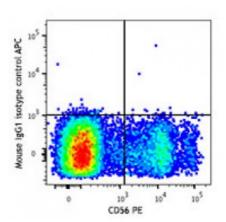
each application.

Application Notes:

The DX9 antibody reacts with the KIR (killer cell inhibitory receptor)

designated NKB1 or KIR3DL1. Additional reported applications (for the relevant formats) include: immunoprecipitation1 and restoring the NK cell cytotoxicity^{4,8}. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays

(Cat. No. 312710).



Application References:

1. Litwin V, et al. 1994. J. Exp. Med. 180:537. (IP)

2. Gumperz J, et al. 1996. J. Exp. Med. 183:1817.

3. Gardiner CM, et al. 2001. J. Immunol. 166:2992.

4. Bakker ABH, et al. 1998. J. Immunol. 160:5239.

5. Goodier M, et al. 2000. J. Immunol. 165:139.

6. Kirwan SE and Burshtyn DN. 2005. J. Immunol. 175:5006. (FC)

7. Yawata M, et al. 2002. Immunogenetics 54:543.

8. Valiante NM, *et al.* 1997. *Immunity* 7:739.

9. Pascal V, et al. 2007. J. Immunol. 179:1625. (FC) PubMed

10. Lichterfeld M, et al. 2008. J. Exp. Med. 204:2813. (FC) PubMed

Description:

CD158e1, also known as NKB1, is a 70 kD member of the immunoglobulin superfamily that is expressed on a subset of natural killer cells and T cells at varying levels among individuals. NKB1 is a type I membrane protein containing two immunoglobulin C2-type domains. The interaction of NKB1 with specific HLA-B antigens on a target cell (the HLA-Bw4 allele, for example) inhibits cytotoxicity and prevents target cell lysis and death. The interactions between KIR and MHC class I are thought to be important in NK and T cell regulation following antigen stimulation. The absence of ligands for KIRs may lower the threshold for activation through activating receptors and increase inflammation and susceptibility to autoimmune disease.

Antigen References:

- 1. Colonna M, et al. 1995. Science 268:405.
- 2. D'Andrea A, et al. 1995. J. Immunol.. 155:2306.
- 3. Uhrburg M, et al. 1997. Immunity 7:753.
- 4. Gumperz JE, et al. 1996. J. E