

PE/Cy7 anti-human CD158e1 (KIR3DL1, NKB1)

Catalog # / Size: 2163595 / 25 tests
2163600 / 100 tests

Clone: DX9

Isotype: Mouse IgG1, κ

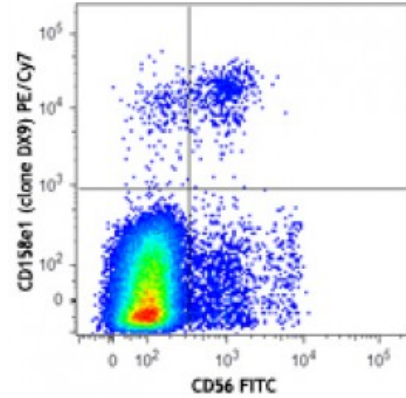
Immunogen: Human NK cell clone VL186-1.6

Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with 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 and 0.2% (w/v) BSA (origin USA).

Concentration: Lot-specific



Human peripheral blood lymphocytes were stained with CD56 FITC and CD158e1 (clone DX9) PE/Cy7 (top) or mouse IgG1 PE/Cy7 isotype control (bottom).

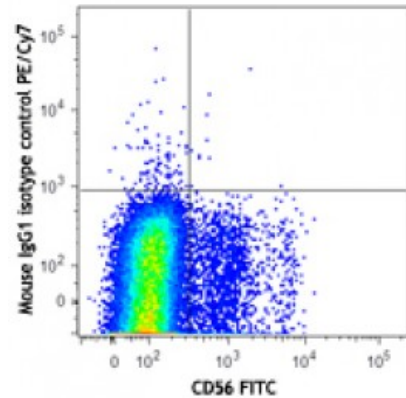
Applications:

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 1. Colonna M, *et al.* 1995. *Science* 268:405.
References: 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*