FITC anti-human CD158e1 (KIR3DL1, NKB1)

Catalog # / Size: 2163525 / 25 tests

2163530 / 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

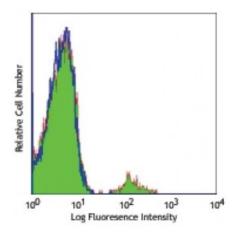
chromatography, and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.

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 stained with DX9 FITC

Applications:

Applications: Flow Cytometry

Recommended

Usage:

Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 microL to 5 microL per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or 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:

- Litwin V, et al. 1994. J. Exp. Med. 180:537. (IP)
 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) <u>PubMed</u> 10. Lichterfeld M, et al. 2008. J. Exp. Med. 204:2813. (FC) <u>PubMed</u>

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