

## FITC anti-human CD158e1 (KIR3DL1, NKB1)

**Catalog # / Size:** 312705 / 25 tests  
312706 / 100 tests

**Clone:** DX9

**Isotype:** Mouse IgG1,  $\kappa$

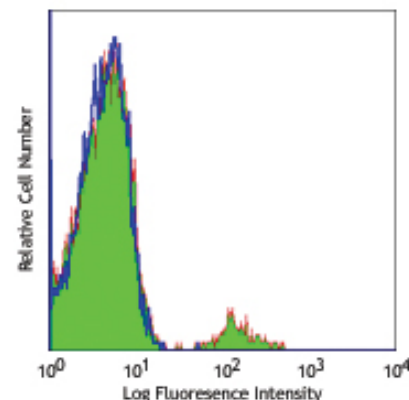
**Immunogen:** Human NK cell clone VL186-1.6

**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).

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.



Human peripheral blood lymphocytes stained with DX9 FITC

## Applications:

**Applications:** FC - Quality tested

**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  $\mu$ l to 5  $\mu$ l per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100  $\mu$ l staining volume or per 100  $\mu$ l of whole blood. It is recommended that the reagent be titrated for optimal performance for each application. Read more at [www.biolegend.com/testsize](http://www.biolegend.com/testsize) regarding the test size change.

**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: immunoprecipitation<sup>1</sup> and restoring the NK cell cytotoxicity<sup>4,8</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/ $\mu$ g, Azide-Free, 0.2  $\mu$ m 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.
- Gardiner CM, *et al.* 2001. *J. Immunol.* 166:2992.
- Bakker ABH, *et al.* 1998. *J. Immunol.* 160:5239.
- Goodier M, *et al.* 2000. *J. Immunol.* 165:139.
- Kirwan SE and Burshtyn DN. 2005. *J. Immunol.* 175:5006. (FC)
- Yawata M, *et al.* 2002. *Immunogenetics* 54:543.
- Valiante NM, *et al.* 1997. *Immunity* 7:739.
- Pascal V, *et al.* 2007. *J. Immunol.* 179:1625. (FC) PubMed
- Lichterfeld M, *et al.* 2008. *J. Exp. Med.* 204:2813. (FC) PubMed

**Description:** 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:**

- Colonna M, *et al.* 1995. *Science* 268:405.
- D'Andrea A, *et al.* 1995. *J. Immunol.* 155:2306.
- Uhrburg M, *et al.* 1997. *Immunity* 7:753.
- Gumperz JE, *et al.* 1996. *J. Exp. Med.* 183:1817.
- Wagtmann N, *et al.* 1995. *Immunity* 3:801.

### Related Products:

Product	Clone	Application
FITC anti-human CD16	3G8	FC
FITC anti-human CD94	DX22	FC
FITC anti-human HLA-DR	L243	FC
FITC Mouse IgG1, $\kappa$ Isotype Ctrl	MOPC-21	FC, ICFC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
FITC anti-human CD56 (NCAM)	MEM-188	FC
FITC anti-human HLA-A,B,C	W6/32	FC
FITC anti-human CD158b (KIR2DL2/L3, NKAT2)	DX27	FC



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