

Biotin anti-human CD158e1 (KIR3DL1, NKB1)

Catalog # / Size: 312704 / 100 µg

Clone: DX9

Isotype: Mouse IgG1, κ

Immunogen: Human NK cell clone VL186-1.6

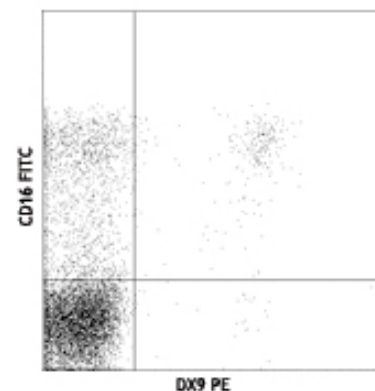
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C. Do not freeze.



Human peripheral blood lymphocytes stained with DX9 PE and CD16 FITC

Applications:

Applications: FC - Quality tested

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤ 0.5 µg per 10⁶ cells in 100 µl volume. 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.
- 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
	PE anti-human CD16	3G8	FC
	PE anti-human CD94	DX22	FC
	Biotin Mouse IgG1, κ Isotype Ctrl	MOPC-21	FC, ICFC
	APC Streptavidin		FC, ICFC
	FITC Streptavidin		FC, ICFC
	PE Streptavidin		FC, ICFC
	PE/Cy5 Streptavidin		FC, ICFC
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	PE anti-human CD56 (NCAM)	MEM-188	FC
	FITC anti-human CD158b (KIR2DL2/L3, NKAT2)	DX27	FC
	Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC

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