

# Product Data Sheet

## Purified anti-human CD158b (KIR2DL2/L3, NKAT2)

**Catalog # / Size:** 312602 / 100 µg

**Clone:** DX27

**Isotype:** Mouse IgG2a, κ

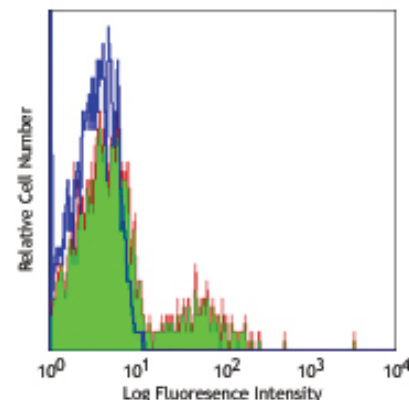
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography.

**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.



Human peripheral blood lymphocytes stained with purified DX27, followed by anti-mouse IgG 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 ≤2.0 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** Additional reported applications (for the relevant formats) include: restoring the NK cell cytotoxicity<sup>1,5</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 312608).

**Application References:**

1. Bakker ABH, *et al.* 1998. *J. Immunol.* 160:5239.
2. Lucas M, *et al.* 2003. *J. Virol.* 77:2251.
3. Goodier M, *et al.* 2000. *J. Immunol.* 165:139.
4. Yawata M, *et al.* 2002. *Immunogenetics* 54:543.
5. Valiante NM, *et al.* 1997. *Immunity* 7:739.
6. Zal B, *et al.* 2008. *J. Immunol.* 181:5233. PubMed

**Description:** The DX27 monoclonal antibody reacts with a common epitope of KIR2DL2 (CD158b1, p58.2), KIR2DL3 (CD158b2, p58.3), and KIR2DS2 (CD158j, p50.2). It is expressed on natural killer cells and a subset of T cells. KIR-NKAT2 is a member of the immunoglobulin superfamily containing two immunoglobulin C2-type domains. Both variants and alternative isoforms of KIR-NKAT2 have been reported. The interaction of KIR-NKAT2 with specific HLA-C antigens on a target cell (HLA-Cw1, HLA-Cw3, HLA-Cw7 alleles, 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 cell 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.

### Related Products:

Product	Clone	Application
Purified anti-human CD16	3G8	FC, IHC, IP, CyTOF®
Purified anti-human CD94	DX22	FC, IHC, IP
Purified anti-human HLA-DR	L243	FC, IHC, IP, WB, CyTOF®
APC Goat anti-mouse IgG (minimal x-reactivity)	Poly4053	FC
FITC Goat anti-mouse IgG (minimal x-reactivity)	Poly4053	FC
Purified Mouse IgG2a, κ Isotype Ctrl	MOPC-173	FC, ICC, IF, IHC, IP, WB
PE Goat anti-mouse IgG (minimal x-reactivity)	Poly4053	FC
Cell Staining Buffer		FC, ICC, ICFC
RBC Lysis Buffer (10X)		FC, ICFC
Purified anti-human CD56 (NCAM)	MEM-188	FC, IHC, IP, WB
Purified anti-human HLA-A,B,C	W6/32	FC, IHC, IP, WB
Purified anti-human CD158e1 (KIR3DL1, NKB1)	DX9	FC, IP



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