

**PerCP/Cy5.5 anti-human CD158b (KIR2DL2/L3, NKAT2)**

**Catalog # / Size:** 2163070 / 100 tests  
2163065 / 25 tests

**Clone:** DX27

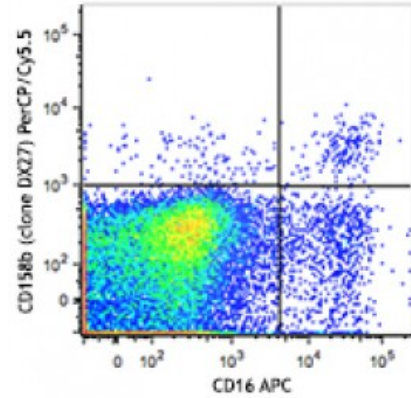
**Isotype:** Mouse IgG2a, κ

**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography and conjugated with PerCP/Cy5.5 under optimal conditions. The solution is free of unconjugated PerCP/Cy5.5 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 CD16 APC and CD158b (clone DX27) PerCP/Cy5.5 (top) or mouse IgG1 PerCP/Cy5.5 isotype control (bottom).

**Applications:**

**Applications:** Flow Cytometry

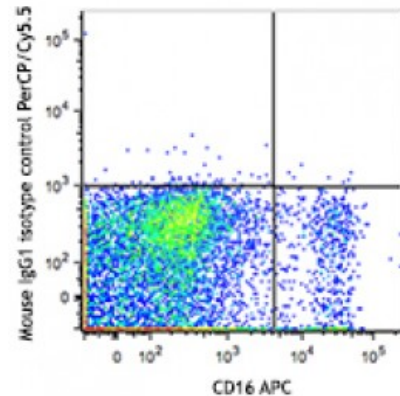
**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* PerCP/Cy5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.

**Application Notes:** The DX27 monoclonal antibody reacts with a common epitope of KIR2DL2 (CD158b1, p58.2), KIR2DL3 (CD158b2, p58.3), and KIR2DS2 (CD158j, p50.2). Additional reported applications (for the relevant formats) include: restoring the NK cell cytotoxicity<sup>1,5</sup>.

**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.



**Description:** CD158b is expressed on natural killer cells and a subset of T cells. It is a member

of the immunoglobulin superfamily containing two immunoglobulin C2-type domains. Both variants and alternative isoforms of CD158b have been reported. The interaction of CD158b 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.
2. Uhrburg M, *et al.* 1997. *Immunity* 7:753.
3. Wagtmann N, *et al.* 1995. *Immunity* 3:801.
4. Dohring C, *et al.* 1996. *Immunogeneti*