SONY

Product Data Sheet

FITC anti-human CD158b/j (KIR2DL2/L3/S2)

Catalog # / Size: 2163020 / 100 tests
2163015 / 25 tests

Clone: DX27

Isotype: Mouse IgG2a, κ

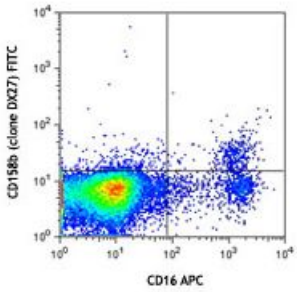
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Workshop Number: V P018

Concentration: Lot-specific

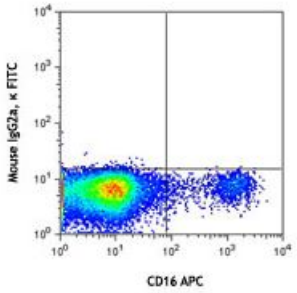


Human peripheral blood lymphocytes were stained with CD158b (clone DX27, top) FITC and CD16 APC or mouse IgG2a, κ FITC isotype control (bottom).

Applications:

Applications: Flow Cytometry

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. **Test size products are transitioning from 20 µl to 5 µl per test**. Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 µl staining volume or per 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.



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[1,5].

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.

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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. *Immunogenetics* 44:227.
5. Maenaka K, *et al.* 1999. *Structure* 7:391.

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