SONY

Product Data Sheet

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

Catalog # / Size: 2163055 / 25 tests
2163060 / 100 tests

Clone: DX27

Isotype: Mouse IgG2a, κ

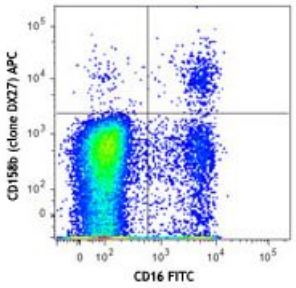
Reactivity: Human

Preparation: The antibody was purified by affinity chromatography and conjugated with APC 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

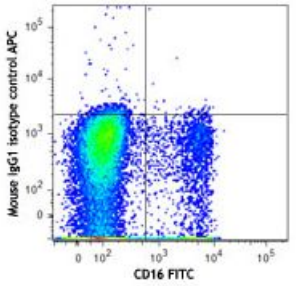


Human peripheral blood lymphocytes were stained with CD16 FITC and CD158b (clone DX27) APC (top) or mouse IgG1 APC isotype control (bottom).

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 µl per million cells or 5 µl 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.

Sony Biotechnology Inc. 1730 North First Street, San Jose, CA 95112 www.sonybiotechnology.com

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.