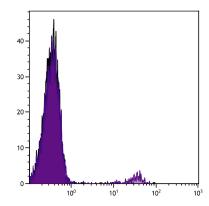
# SouthernBiotech 1



# Mouse Anti-Human CD158e1

Cat. No.	Format	Size
9850-01	Purified (UNLB)	0.1 mg
9850-09	R-phycoerythrin (PE)	100 tests
9850-11	Allophycocyanin (APC)	100 tests
9850-27	Alexa Fluor® 700 (AF700)	100 tests
9850-30	Alexa Fluor® 488 (AF488)	100 tests
9850-31	Alexa Fluor® 647 (AF647)	100 tests



Human peripheral blood lymphocytes were stained with Mouse Anti-Human CD158e1-PE (SB Cat. No. 9850-09).

#### **Overview**

Clone DX9

Isotype Mouse (BALB/c) IgG₁κ

Immunogen Human NK clone VL186-1 (CD3, CD16<sup>+</sup>, CD56<sup>+</sup>)

Specificity Human/Baboon CD158e1; Mr 70 kDa

Alternate Name(s) NKB1, p70, KIR, 3DL1, KIR3DL1, KIR3D, NKAT3

Workshop VII 70319

## **Description**

CD158e1 is a 70 kDa transmembrane glycoprotein and a killer cell immunoglobulin (Ig)-like receptor (KIR) that is expressed on a subset of natural killer cells and T cells. The monoclonal antibody DX9 is expressed on a subset of CD3<sup>-</sup>, CD56<sup>+</sup> NK cells isolated from peripheral blood at varying levels (<0.1% to 61%) among individuals but not on thymocytes, B lymphocytes, granulocytes, or monocytes. Interactions with CD158e1 and certain MHC HLA-B antigens on a target cell inhibits cytotoxicity, possibly preventing target cell lysis and death. KIR and MHC class I interactions may regulate NK and T cell response to antigen stimulation.

#### **Applications**

FC – Quality tested <sup>1,2,4,6-9</sup> IHC-FS – Reported in literature <sup>2</sup> IHC-PS – Reported in literature <sup>3</sup> ICC – Reported in literature <sup>4</sup> IP – Reported in literature <sup>1,4,9</sup> Block – Reported in literature <sup>1,5,7-9</sup>

### **Working Dilutions**

Flow Cytometry Purified (UNLB) antibody  $\leq 1 \mu g/10^6$  cells

PE, APC, AF488, AF647, and AF700 conjugates 10  $\mu$ L/10<sup>6</sup> cells For flow cytometry, the suggested use of these reagents is in a final volume of 100  $\mu$ L

Other Applications Since applications vary, you should determine the optimum working dilution for the product that is

appropriate for your specific need.

# For Research Use Only. Not for Diagnostic or Therapeutic Use.

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## **Handling and Storage**

- The purified (UNLB) antibody is supplied as 0.1 mg of purified immunoglobulin in 1.0 mL of borate buffered saline, pH 8.2. No
  preservatives or amine-containing buffer salts added. Store at 2-8°C.
- The R-phycoerythrin (PE) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C.
   Do not freeze!
- The allophycocyanin (APC) conjugate is supplied as 100 tests in 1.0 mL of PBS/NaN<sub>3</sub> and a stabilizing agent. Store at 2-8°C. Do not freeze!
- The Alexa Fluor<sup>®</sup> 488 (AF488), Alexa Fluor<sup>®</sup> 647 (AF647), and Alexa Fluor<sup>®</sup> 700 (AF700) conjugates are supplied as 100 tests in 1.0 mL of PBS/NaN<sub>3</sub>. Store at 2-8°C.
- Protect fluorochrome-conjugated forms from light. Reagents are stable for the period shown on the label if stored as directed.

#### Warning

Some reagents contain sodium azide. Please refer to product specific SDS.

#### References

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- 3. Hisashi Y, Yamada K, Kuwaki K, Tseng Y, Dor FJ, Houser SL, et al. Rejection of cardiac xenografts transplanted from α 1,3-galactosyltransferase gene-knockout (GalT-KO) pigs to baboons. Am J Transplant. 2008;8:2516-26. (IHC-PS, Baboon Reactivity)
- Purdy AK, Alvarez Arias DA, Oshinsky J, James AM, Serebriiskii I, Campbell KS. The AP-2 clathrin adaptor mediates endocytosis of an inhibitory killer cell Ig-like receptor in human NK cells. J Immunol. 2014;193:4675-83. (FC, IP, ICC)
- Söderström K, Corliss B, Lanier LL, Phillips JH. CD94/NKG2 is the predominant inhibitory receptor involved in recognition of HLA-G by decidual and peripheral blood NK cells. J Immunol. 1997;159:1072-5. (Block)
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- 7. Valiante NM, Uhrberg M, Shilling HG, Lienert-Weidenbach K, Arnett KL, D'Andrea A, et al. Functionally and structurally distinct NK cell receptor repertoires in the peripheral blood of two human donors. Immunity. 1997;7:739-51. (FC, Block)
- Bakker AB, Phillips JH, Figdor CG, Lanier LL. Killer cell inhibitory receptors for MHC class I molecules regulate lysis of melanoma cells mediated by NK cells. γδ T cells. and antigen-specific CTL. J Immunol. 1998;160:5239-45. (FC. Block)
- 9. Yusa S, Catina TL, Campbell KS. SHP-1- and phosphotyrosine-independent inhibitory signaling by a killer cell Ig-like receptor cytoplasmic domain in human NK cells. J Immunol. 2002;168:5047-57. (FC, IP, Block)

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