Datasheet for ABIN489933

anti-KIR2DL4/CD158d antibody (PE)

1 Image | 5 Publications

Go to Product page

Overview

Quantity:	100 tests
Target:	KIR2DL4/CD158d (KIR2DL4)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This KIR2DL4/CD158d antibody is conjugated to PE
Application:	Flow Cytometry (FACS)

Product Details

Immunogen:	NK3.3 cells and KIR2DL4-Ig fusion protein
Clone:	MAb 33
Isotype:	IgG1 kappa
Specificity:	The mouse monoclonal antibody mAb#33 (also known as mAb 33 or 33) recognizes extracellular portion of CD158d / KIR2DL4, a 45 kDa NK cell marker. Cell surface expression and function of CD158d / KIR2DL4 depends on genotype of particular individuals.
Cross-Reactivity (Details):	Human
Purification:	Purified antibody is conjugated with R-phycoerythrin (PE) under optimum conditions. Unconjugated antibody and free fluorochrome are removed by size-exclusion chromatography.

Target Details

Target:	KIR2DL4/CD158d (KIR2DL4)

Target Details

Alternative Name:	CD158d / KIR2DL4 (KIR2DL4 Products)
Background:	Killer cell immunoglobulin like receptor, two Ig d,CD158d / KIR2DL4 is a KIR family member that shares structural features with both activating and inhibitory receptors and may mediate different functions under different circumstances. It contains cytoplasmic ITIM, suggesting inhibitory function, but also transmembrane domain similar to those of activating KIRs. It has been reported that CD158d serves as an inhibitory receptor for peripheral and uterine NK cells, but its ligation with soluble mAbs (unlike immobilized mAbs) results in activation of IFN-γ, secretion. CD158d also binds both membrane form and soluble form of its ligand HLA-G.,KIR2DL4, KIR103AS, 103AS, 15.212
Gene ID:	3805
UniProt:	Q99706

Application Details

Application Notes:	Flow cytometry: The reagent is designed for analysis of human blood cells using 20 µL reagent / 100 µL of whole blood or 10^6 cells in a suspension. The content of a vial (2 ml) is sufficient for 100 tests.
Comment:	The purified antibody is conjugated with R-Phycoerythrin (PE) under optimum conditions. The conjugate is purified by size-exclusion chromatography and adjusted for direct use. No reconstitution is necessary.
Restrictions:	For Research Use only

Handling

Reconstitution:	No reconstitution is necessary.
Buffer:	Stabilizing phosphate buffered saline (PBS), pH 7.4, 15 mM sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	**Do not freeze.** Avoid prolonged exposure to light.
Storage:	4 °C
Storage Comment:	Store at 2-8°C. Protect from prolonged exposure to light. Do not freeze.

Publications

Product cited in:

Rajagopalan, Bryceson, Kuppusamy, Geraghty, van der Meer, Joosten, Long: "Activation of NK cells by an endocytosed receptor for soluble HLA-G." in: **PLoS biology**, Vol. 4, Issue 1, pp. e9, (2006) (PubMed).

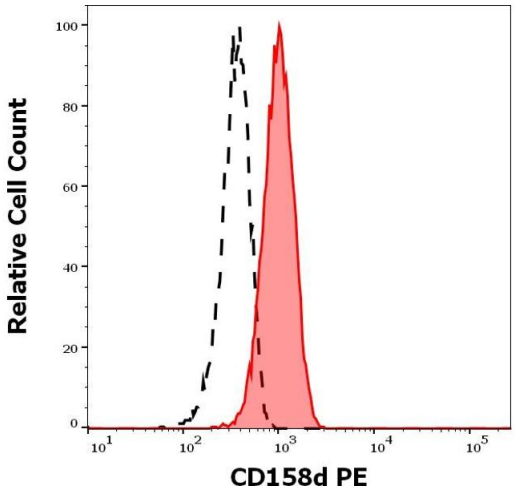
LeMaoult, Zafaranloo, Le Danff, Carosella: "HLA-G up-regulates ILT2, ILT3, ILT4, and KIR2DL4 in antigen presenting cells, NK cells, and T cells." in: **FASEB journal : official publication of the Federation of American Societies for Experimental Biology**, Vol. 19, Issue 6, pp. 662-4, (2005) (PubMed).

Yan, Fan: "Residues Met76 and Gln79 in HLA-G alpha1 domain involve in KIR2DL4 recognition." in: **Cell research**, Vol. 15, Issue 3, pp. 176-82, (2005) (PubMed).

Goodridge, Witt, Christiansen, Warren: "KIR2DL4 (CD158d) genotype influences expression and function in NK cells." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 171, Issue 4, pp. 1768-74, (2003) (PubMed).

Rajagopalan, Fu, Long: "Cutting edge: induction of IFN-gamma production but not cytotoxicity by the killer cell Ig-like receptor KIR2DL4 (CD158d) in resting NK cells." in: **Journal of immunology (Baltimore, Md. : 1950)**, Vol. 167, Issue 4, pp. 1877-81, (2001) (PubMed).

Images



Flow Cytometry

Image 1. Separation of cells stained using anti-human CD158d (mAb#33) PE antibody (20 µL reagent per million cells in 100 µL of cell suspension, red-filled) from cells stained using mouse IgG1 isotype control (MOPC-21) PE antibody (concentration in sample 7.5 µg/mL, same as CD158d PE concentration, black-dashed) in flow cytometry analysis (surface staining) of NKL cell suspension.