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KIR2DL4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9042B

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q99706
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23034
Calculated MW	41487
Antigen Region	296-323

Additional Information

Gene ID	3805
Other Names	Killer cell immunoglobulin-like receptor 2DL4, CD158 antigen-like family member D, G9P, Killer cell inhibitory receptor 103AS, KIR-103AS, MHC class I NK cell receptor KIR103AS, CD158d, KIR2DL4, CD158D, KIR103AS
Target/Specificity	This KIR2DL4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 296-323 amino acids from the C-terminal region of human KIR2DL4.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	KIR2DL4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	KI2L4
Function	Receptor for non-classical major histocompatibility class Ib HLA-G molecules. Recognizes HLA-G in complex with B2M/beta-2 microglobulin and

	a nonamer self-peptide (peptide-bound HLA-G-B2M). In decidual NK cells, binds peptide-bound HLA-G-B2M complex and triggers NK cell senescence-associated secretory phenotype as a molecular switch to promote vascular remodeling and fetal growth in early pregnancy (PubMed:16366734, PubMed:23184984, PubMed:29262349). May play a role in balancing tolerance and antiviral-immunity at maternal-fetal interface by keeping in check the effector functions of NK, CD8+ T cells and B cells (PubMed:10190900, PubMed:16366734). Upon interaction with peptide-bound HLA-G-B2M, initiates signaling from the endosomal compartment leading to downstream activation of PRKDC-XRCC5 and AKT1, and ultimately triggering NF-kappa-B-dependent pro-inflammatory response (PubMed:20179272).
Cellular Location	Cell membrane; Single-pass type I membrane protein. Early endosome membrane
Tissue Location	Expressed in decidual NK cells and innate lymphoid cell type I (ILC1) (PubMed:29262349). Expressed in a subset of peripheral NK cells (PubMed:19304799).

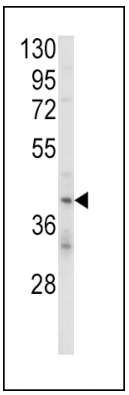
Background

KIR2DL4 is killer cell immunoglobulin-like receptors (KIRs) which are transmembrane glycoproteins expressed by natural killer cells and subsets of T cells. The KIR genes are polymorphic and highly homologous and they are found in a cluster on chromosome 19q13.4 within the 1 Mb leukocyte receptor complex (LRC).

References

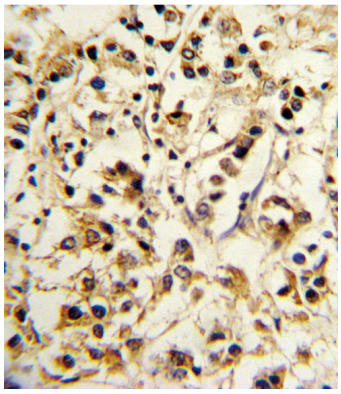
Hollenbach,J.A., et.al., Tissue Antigens (2010) In press
Varla-Leftherioti,M., et.al., Tissue Antigens (2010) In press

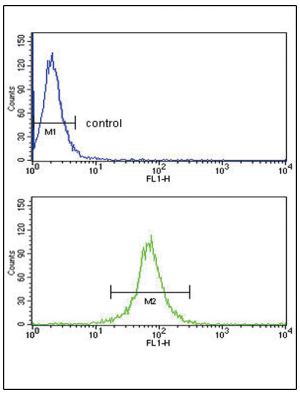
Images



Western blot analysis of KIR2DL4 Antibody (C-term) (Cat. #AP9042b) in MDA-MB231 cell line lysates (35ug/lane). KIR2DL4 (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human breast carcinoma reacted with KIR2DL4 Antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.





KIR2DL4 Antibody (C-term) (Cat.#AP9042b) flow cytometry analysis of MDA-MB231 cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

- Genetic polymorphisms and expression of HLA-G and its receptors, KIR2DL4 and LILRB1, in non-small cell lung cancer.