

KIR2DL4 Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP9042B

Specification

KIR2DL4 Antibody (C-term) - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Antigen Region FC, IHC-P, WB,E <u>099706</u> Human Rabbit Polyclonal Rabbit IgG 296-323

KIR2DL4 Antibody (C-term) - 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 $FC \sim 1:10 \sim 50$ $IHC-P \sim 1:10 \sim 50$ $WB \sim 1:1000$ $E \sim Use$ 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.

KIR2DL4 Antibody (C-term) - 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:<u>16366734</u>, PubMed:<u>23184984</u>, PubMed:<u>29262349</u>). 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:<u>10190900</u>, PubMed:<u>16366734</u>). 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:<u>20179272</u>).

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).

KIR2DL4 Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KIR2DL4 Antibody (C-term) - 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.

KIR2DL4 Antibody (C-term) - 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).

KIR2DL4 Antibody (C-term) - References

Hollenbach, J.A., et.al., Tissue Antigens (2010) In press Varla-Leftherioti, M., et.al., Tissue Antigens (2010) In press **KIR2DL4 Antibody (C-term) - Citations**

• Genetic polymorphisms and expression of HLA-G and its receptors, KIR2DL4 and LILRB1, in



non-small cell lung cancer.