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KIR2DL4 Rabbit pAb

Catalog # AP99976

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q99706
Other Accession	Q99706
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41487
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CD158
Epitope Specificity	51-150/377
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the immunoglobulin superfamily.Contains 2 Ig-like C2-type (immunoglobulin-like)
SUBUNIT	Interacts with ARRB2.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	Killer cell immunoglobulin-like receptors (KIRs) 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). The gene content of the KIR gene cluster varies among haplotypes, although several "framework" genes are found in all haplotypes (KIR3DL3, KIR3DP1, KIR3DL4, KIR3DL2). The KIR proteins are classified by the number of extracellular immunoglobulin domains (2D or 3D) and by whether they have a long (L) or short (S) cytoplasmic domain. KIR proteins with the long cytoplasmic domain transduce inhibitory signals upon ligand binding via an immune tyrosine-based inhibitory motif (ITIM), while KIR proteins with the short cytoplasmic domain lack the ITIM motif and instead associate with the TYRO protein tyrosine kinase binding protein to transduce activating signals. The ligands for several KIR proteins are subsets of HLA class I molecules; thus, KIR proteins are thought to play an important role in regulation of the immune response. This gene is one of the "framework" loci that is present on all haplotypes. Alternative splicing results in multiple transcript variants. [provided by RefSeq]

Additional Information

Gene ID	3805
Other Names	CD158D; G9P; KIR-103AS; KIR-2DL4; KIR103; KIR103AS; KI2L4_HUMAN; KIR2DL4; CD158 antigen-like family member D; Killer cell inhibitory receptor

	103AS (KIR-103AS); MHC class I NK cell receptor KIR103AS; killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 4; killer cell immunoglobulin-like receptor, two domains, long cytoplasmic tail, 4
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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).

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