10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KIR2DL4 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP9042b

Specification

KIR2DL4 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession Q99706

KIR2DL4 Antibody (C-term) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP9042b was selected from the C-term region of human KIR2DL4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

KIR2DL4 Antibody (C-term) Blocking Peptide - 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:<a

href="http://www.uniprot.org/citations/10190900" target="_blank">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).

KIR2DL4 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

KIR2DL4 Antibody (C-term) Blocking Peptide - Images

KIR2DL4 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - References

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