

KIR2DS5 Antibody (Center) Blocking Peptide

Synthetic peptide Catalog # BP9602c

Specification

KIR2DS5 Antibody (Center) Blocking Peptide - Product Information

Primary Accession

Q14953

KIR2DS5 Antibody (Center) Blocking Peptide - Additional Information

Gene ID 3810

Other Names

Killer cell immunoglobulin-like receptor 2DS5, CD158 antigen-like family member G, MHC class I NK cell receptor, Natural killer-associated transcript 9, NKAT-9, CD158g, KIR2DS5, CD158G, NKAT9

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.

KIR2DS5 Antibody (Center) Blocking Peptide - Protein Information

Name KIR2DS5 {ECO:0000303|PubMed:18624290, ECO:0000312|HGNC:HGNC:6337}

Function

Activating natural killer (NK) receptor that recognizes C2 epitopes of HLA-C alleles. Bridging the innate and adaptive immune systems, NK cells express a number of cell surface receptors which either inhibit or stimulate their cytotoxicity (PubMed:18624290, PubMed:18682925, PubMed:28685972). Able to activate NK cells citotoxicity and cytokine production such as IFNG (PubMed:18624290, PubMed:24269691). Receptor functions are attenuated even lost in some alleles, such as KIR2DS5*002 represented in this entry (PubMed:28685972).

Cellular Location

Cell membrane; Single-pass type I membrane protein; Extracellular side

Tissue Location

Expressed on a discrete subset of peripheral blood NK cells.



KIR2DS5 Antibody (Center) Blocking Peptide - Protocols

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

Blocking Peptides

KIR2DS5 Antibody (Center) Blocking Peptide - Images

KIR2DS5 Antibody (Center) Blocking Peptide - Background

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.

KIR2DS5 Antibody (Center) Blocking Peptide - References

Vilches, C., et al. Tissue Antigens 56(5):453-456(2000)Bottino, C., et al. Eur. J. Immunol. 26(8):1816-1824(1996)Dohring, C., et al. Immunogenetics 44(3):227-230(1996)Wagtmann, N., et al. Immunity 2(5):439-449(1995)