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KIR2DS4 Human

Killer Cell Immunoglobulin-Like Receptor, 2 Domains Short Cytoplasmic Tail, 4 Recombinant Human

RCP1165

Product Overview

Name	KIR2DS4 Human

Description

Killer Cell Immunoglobulin-Like Receptor, 2 Domains Short Cytoplasmic Tail, 4 Recombinant Human

Accession (Primary)	P43632

Synonyms

Killer cell immunoglobulin-like receptor 2DS4, MHC class I NK cell receptor, Natural killer-associated transcript 8, NKAT-8, P58 natural killer cell receptor clone CL-39, p58 NK receptor, CL-17, CD158 antigen-like family member I, CD158i antigen, KIR2DS4, CD158I, KKA3, NKAT8, KIR1D, KIR412, MGC120019, MGC125315, MGC125317.

Introduction

Killer-cell immunoglobulin-like receptors (KIRs), are a family of cell surface glycoproteins found on Natural Killer (NK) Cells, which are important cells of the immune system. They control the killing function of these cells by interacting with MHC class I molecules, which are expressed on all cell types. This interaction allows them to identify virally infected cells or tumor cells that have a distinctive low level of Class I MHC on their surface. The majority of KIRs are inhibitory, which means that their recognition of MHC suppresses the cytotoxic activity of their NK cell. Only a limited number of KIRs have the capacity to activate cells. The KIR genes are found in a cluster on chromosome 19q13.4 within the 1 Mb leukocyte receptor complex (LRC). KIR molecules are extremely polymorphic, meaning their gene sequences differ significantly between individuals, so that different individuals have different arrays/repertoires of KIR genes. The KIR proteins are categorized 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). Whereas 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. KIR2DS4 is an activating Killer Cell Ig-like Receptor (KIR, previously called p50 KIR, p50.3, cl39, or KAR-K1), which may recognize class I MHC molecules. KIR2DS4 does not inhibit the activity of NK cells.

Source

Escherichia Coli.

Physical Appearance

Sterile filtered colorless solution.

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Formulation

KIR2DS4 protein solution (1mg/ml) contains 20mM Tris-HCl (pH-7.5).

Stability

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

Purity

Greater than 95.0% as determined by SDS-PAGE.

Amino acid sequence

MEGVHRKPSF LALPGHLVKS EETVILQCWS DVMFEHFLLH REGKFNNTLH LIGEHHDGVS KANFSIGPMM PVLAGTYRCY GSVPHSPYQL SAPSDPLDMV IIGLYEKPSL SAQPGPTVQA GENVTLSCSS RSSYDMYHLS REGEAHERRL PAVRSINGTF QADFPLGPAT HGGTYRCFGS FRDAPYEWSN SSDPLLVSVT GN.

Precautions

KIR2DS4 Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (P43632)