

Recombinant Human NKAT-1/KIR2DL1/CD158a Protein

Catalog No.: RP01431 Recombinant

Sequence Information

Species Gene ID Swiss Prot HEK293 cells 3802 P43626

Tags

C-His&Avi

Synonyms

KIR2DL1;CD158A;KIR-K64;KIR221;NKAT;NKAT-1;NKAT1;p58.

Product Information

Source Purification
HEK293 cells > 95% by SDS-

PAGE.

Endotoxin

Please contact us for more information.

Formulation

Lyophilized from a 0.22 µm filtered solution of PBS, pH 7.4.

Reconstitution

Centrifuge the vial before opening. Reconstitute to a concentration of 0.1-0.5 mg/mL in sterile distilled water. Avoid vortex or vigorously pipetting the protein. For long term storage, it is recommended to add a carrier protein or stablizer (e.g. 0.1% BSA, 5% HSA, 10% FBS or 5% Trehalose), and aliquot the reconstituted protein solution to minimize free-thaw cycles.

Contact

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Background

Killer cell immunoglobulin-like receptor 2DL1 or KIR2DL1 is an inhibitory Natural Killer cell immunoglobulin-like receptor with two extracellular immunoglobulin domains. KIR2DL1 is a member of the Killer cell immunoglobulin-like receptor family whose members are classified by the number of the extracellular immunoglobulin domains and the length of the cytoplasm domain. KIR2DL1 is a transmembrane glycoprotein expressed by natural killer cells and subsets of T cells. KIR2DL1 down-regulates the cytotoxicity of NK cells upon recognition of specific class I major histocompatibility complex (MHC) molecules on target cells. It has been reported that the KIR2DL1 is bound to its class I MHC ligand, HLA-Cw4. The KIR2DL1-HLA-Cw4 interface exhibits charge and shape complementarity. Specificity is mediated by a pocket in KIR2DL1 that hosts the Lys80 residue of HLA-Cw4. Many residues conserved in HLA-C and KIR2DL receptors make different interactions in KIR2DL1-HLA-Cw4 and a previously reported KIR2DL2-HLA-Cw3 complex. A dimeric aggregate of KIR-HLA-C complexes was observed in one KIR2DL1-HLA-Cw4 crystal.

Basic Information

Description

Recombinant Human NKAT-1/KIR2DL1/CD158a Protein is produced by HEK293 cells expression system. The target protein is expressed with sequence (His22-Arg242) of human KIR2DL1 (Accession #NP_055033.2) fused with a $6\times$ His , Avi tag at the C-terminus.

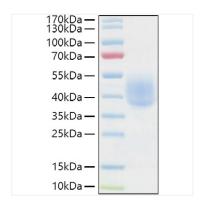
Bio-Activity

Measured by its binding ability in a functional ELISA.Immobilized Human KIR2DL1 at $1\mu g/mL$ (100 $\mu L/well$) can bind KIR2DL1 Rabbit pAb with a linear range of 1-99 ng/mL.

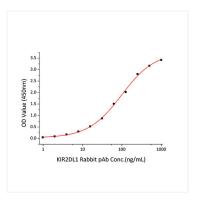
Storage

Store at -20°C. Store the lyophilized protein at -20°C to -80 °C up to 1 year from the date of receipt.
 After reconstitution, the protein solution is stable at -20°C for 3 months, at 2-8°C for up to 1 week. Avoid repeated freeze/thaw cycles.

Validation Data



Recombinant Human NKAT-1/KIR2DL1/CD158a Protein was determined by SDS-PAGE with Coomassie Blue, showing a band at 38-52kDa.



Immobilized recombinant Human KIR2DL1 at 1 μ g/mL (100 μ L/well) can bind KIR2DL1 Rabbit pAb with a linear range of 1-99 ng/mL.