



Recombinant Protein Technical Manual

Recombinant Human KIR2DL1/CD158a Protein (Fc Tag)

RPES0962

Product Data:

Product SKU: RPES0962

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_055033.2

Protein Information:

Molecular Mass: 51.7 kDa

AP Molecular Mass: 70 kDa

Tag: C-Fc

Bio-activity:

Purity: > 90 % as determined by reducing SDS-PAGE.

Endotoxin: < 1.0 EU per µg as determined by the LAL method.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile PBS, pH 7.4

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: CD158A;KIR-K64;KIR221;NKAT;NKAT;NKAT1;p58.1;XXbac-BCX195L8.1;XXbac-BPG184J6.7

Immunogen Information:

Sequence: Met 1-His 245

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 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 in KIR2DL receptors make different interactions in KIR2DL1-HLA-Cw4 and in a previously reported KIR2DL2-HLA-Cw3 complex. A dimeric aggregate of KIR-HLA-C complexes was observed in one KIR2DL1-HLA-Cw4 crystal.