

Recombinant Human KIR2DL1/CD158a Protein (His Tag)

Catalog Number: GPMH0354

Note: Centrifuge before opening to ensure complete recovery of vial contents.

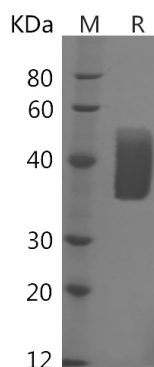
Description

Species	Human
Source	HEK293 Cells-derived Human KIR2DL1 protein Met1-His245, with an C-terminal His
Calculated MW	26 kDa
Observed MW	45 kDa
Accession	P43626
Bio-activity	Not validated for activity

Properties

Purity	> 90% as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU/mg of the protein as determined by the LAL method
Storage	Generally, 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 a 0.2 µm filtered solution in PBS with 5% Trehalose and 5% Mannitol.
Reconstitution	It is recommended that sterile water be added to the vial to prepare a stock solution of 0.5 mg/mL. Concentration is measured by UV-Vis.

Data



> 92 % as determined by reducing SDS-PAGE.

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.

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