

**Synonym**

CD158a

**Source**

Human KIR2DL1, Fc Tag(KI1-H5255) is expressed from human 293 cells (HEK293). It contains AA His 22 - Arg 242 (Accession # [P43626-1](#)).

Predicted N-terminus: His 22

**Molecular Characterization**

KIR2DL1(His 22 - Arg 242) P43626-1	Fc(Pro 100 - Lys 330) P01857
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This protein carries a human IgG1 Fc tag at the C-terminus.

The protein has a calculated MW of 50.7 kDa. The protein migrates as 60-70 kDa under reducing (R) condition (SDS-PAGE) due to glycosylation.

**Endotoxin**

Less than 1.0 EU per µg by the LAL method.

**Purity**

>90% as determined by SDS-PAGE.

**Formulation**

Lyophilized from 0.22 µm filtered solution in 50 mM Tris, 100 mM Glycine, 25 mM Arginine, 150 mM NaCl, pH7.5 with trehalose as protectant.

Contact us for customized product form or formulation.

**Reconstitution**

Please see Certificate of Analysis for specific instructions.

*For best performance, we strongly recommend you to follow the reconstitution protocol provided in the CoA.*

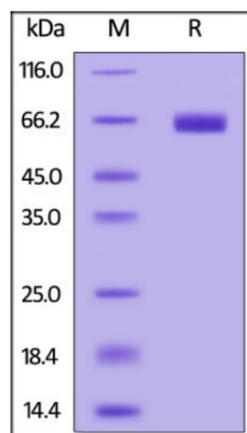
**Storage**

For long term storage, the product should be stored at lyophilized state at -20°C or lower.

*Please avoid repeated freeze-thaw cycles.*

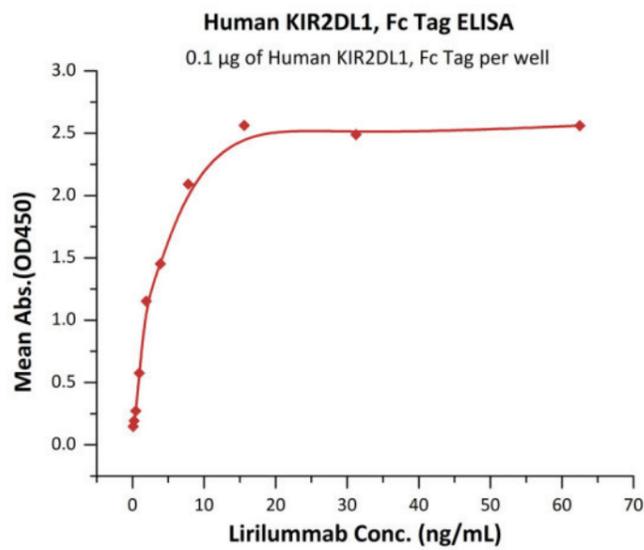
This product is stable after storage at:

- -20°C to -70°C for 12 months in lyophilized state;
- -70°C for 3 months under sterile conditions after reconstitution.

**SDS-PAGE**

Human KIR2DL1, Fc Tag on SDS-PAGE under reducing (R) condition. The gel was stained with Coomassie Blue. The purity of the protein is greater than 90%.

**Bioactivity-ELISA**



Immobilized Human KIR2DL1, Fc Tag (Cat. No. KI1-H5255) at 1 µg/mL (100 µL/well) can bind Lirilumab with a linear range of 0.1-8 ng/mL (QC tested).

### Background

Killer cell immunoglobulin-like receptor 2DL1(KIR2DL1), which belongs to the immunoglobulin superfamily, is an inhibitory receptor of NK cells. Regulation of NK cell activity is mediated through killer-cell immunoglobulin-like receptors (KIR) ability to recognize human leukocyte antigen (HLA) class I molecules as ligands. Interaction of KIR and HLA is implicated in viral infections, autoimmunity, and reproduction and there is growing evidence of the coevolution of these two independently segregating gene families. Association of KIR2DL1 with  $\beta$ -arrestin 2 mediated recruitment of the tyrosine phosphatases SHP-1 and SHP-2 to KIR2DL1 and facilitated downstream inhibitory signaling.

### Clinical and Translational Updates

Please contact us via [TechSupport@acrobiosystems.com](mailto:TechSupport@acrobiosystems.com) if you have any question on this product.