# Recombinant Human Killer cell immunoglobulin-like receptor 3DL2 (KIR3DL2), partial (Active)

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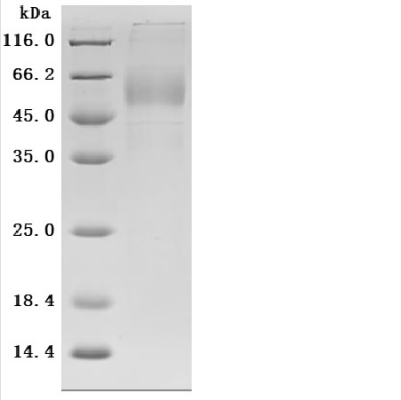
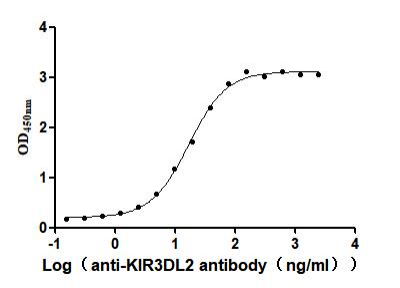
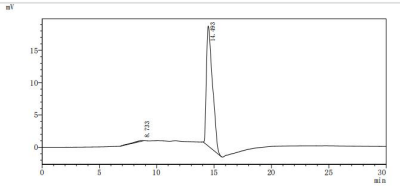
| **Product Code** | CSB-MP012365HU1 |
| **Abbreviation** | Recombinant Human KIR3DL2 protein, partial (Active) |
| **Storage** | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |
| **Uniprot No.** | P43630 |
| **Form** | Lyophilized powder |
| **Storage Buffer** | Lyophilized from a 0.2 μm filtered 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0 |
| **Product Type** | Recombinant Protein |
| **Immunogen Species** | Homo sapiens (Human) |
| **Biological Activity** | Measured by its binding ability in a functional ELISA. Immobilized Human KIR3DL2 at 2 μg/mL can bind Anti-KIR3DL2 recombinant antibody (CSB-RA012365MA1HU), the EC50 is 14.18-23.93 ng/mL. |
| **Purity** | Greater than 95% as determined by SDS-PAGE.<br>Greater than 95% as determined by SEC-HPLC. |
| **Sequence** | LMGGQDKPFLSARPSTVVPRGGHVALQCHYRRGFNNFMLYKEDRSHVPIFHG RIFQESFIMGPVTPAHAGTYRCRGSRPHSLTGWSAPSNPLVIMVTGNHRKPSL LAHPGPLLKSGETVILQCWSDVMFEHFFLHREGISEDPSRLVGQIHDGVSKAN FSIGPLMPVLAGTYRCYGSVPHSPYQLSAPSDPLDIVITGLYEKPSLSAQPGPT VQAGENVTLSCSSWSSYDIYHLSREGEAHERRLRAVPKVNRTFQADFPLGPA THGGTYRCFGSFRALPCVWSNSSDPLLVSVTGNPSSSWPSPTEPSSKSGICR HLH |
| **Source** | Mammalian cell |
| **Target Names** | KIR3DL2 |
| **Expression Region** | 22-340aa |
| **Notes** | Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week. |
| **Tag Info** | C-terminal 10xHis-tagged |
| **Mol. Weight** | 36.4KDa |
| **Protein Length** | Partial |
| **Image** | |




(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.




Activity
Measured by its binding ability in a functional ELISA. Immobilized Human KIR3DL2 at 2μg/mL can bind Anti-KIR3DL2 recombinant antibody (CSB-RA012365MA1HU)?the $EC_{50}$ is 14.18-23.93 ng/mL.



The purity of KIR3DL2 was greater than 95% as determined by SEC-HPLC

## Description

Recombinant human KIR3DL2 protein is produced using a mammalian cell expression system. The gene fragment encoding human KIR3DL2 (22-340aa) is fused with a 10xHis-tag gene at the C-terminus and inserted into a plasmid vector. The recombinant vector is transfected into mammalian cells, which are then cultured for protein expression. The harvested recombinant human KIR3DL2 protein exhibits over 90% purity as determined by SDS-PAGE, and its endotoxin content is less than 1.0 EU/ug measured by the LAL method. The protein's activity is validated through its interaction with KIR3DL2 recombinant antibody (CSB-RA012365MA1HU), showcasing its potential for research and clinical applications.

KIR3DL2 is not only expressed on NK cells, T cells, and B cells, but also on DC cells, monocytes, and macrophages. Both KIR and their ligand MHC-I molecules exhibit high polymorphism, and specific KIR-MHC-I interactions can influence the occurrence, progression, and outcomes of various diseases, such as pregnancy complications, viral infections, autoimmune diseases, and hematologic malignancies. MHC-I molecules are expressed on the majority of cells in the body, and the presence of inhibitory receptors KIR and KLR effectively prevents NK cells from attacking normal self-tissue cells. The anti-tumor activity of NK cells may be inhibited through monoclonal antibodies that block the KIR signaling pathway and disrupt its interaction. Research on therapeutic strategies based on KIR-HLA interactions will contribute to

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| | treatments for autoimmune diseases, cancer, and cytokine-related conditions. Consequently, some anti-KIR monoclonal antibodies have been applied in clinical trials. Developing active mammalian KIR3DL2 protein aids in creating monoclonal antibodies targeting inhibitory receptors, blocking inhibitory signaling pathways, and restoring NK cell functionality for treating malignant diseases. |
| **Endotoxin** | Less than 1.0 EU/ug as determined by LAL method. |
| **Reconstitution** | We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL.We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference. |
| **Shelf Life** | The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself.<br>Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C. |