Data Sheet (Cat.No.TMPY-03652)

TargetMol

KIR2DL4 Protein, Human, Recombinant

General Information

Synonyms:	KIR2DL4;KIR103;G9P;CD158D;KIR;KIR-2DL4;KIR-103AS;killer cell immunoglobulin like receptor, two Ig domains and long cytoplasmic tail 4;KIR103AS
Protein Construction:	A DNA sequence encoding the human KIR2DL4 (ADY38409.1)(Met1-His242) was expressed with six amino acids (LEVLFQ) at the C-terminus was expressed and purified. Predicted N terminal: Trp 24
Species:	Human
Expression Host:	CHO Cells
Accession:	ADY38409.1
Molecular Weight:	25.1 kDa (predicted); 33-37 kDa (reducing conditions)

QC Testing

Biological Activity:	Activity testing is in progress. It is theoretically active, but we cannot guarantee it. If you require protein activity, we recommend choosing the eukaryotic expression version first.
Purity:	> 85 % as determined by SDS-PAGE
Endotoxin:	< 1.0 EU/μg of the protein as determined by the LAL method.
Formulation:	Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization.

Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

Protein Background

KIR2DL4, also known as CD158d, is a member of the killer cell Ig-like receptor (KIR) family. KIRs are transmembrane glycoproteins expressed by natural killer cells and subsets of T cells. The KIR genes are polymorphic and highly homologous. KIR2DL4 is expressed in all NK cells and some T cells. KIR2DL4 activates the

cytotoxicity of NK cells, despite the presence of an immunoreceptor tyrosine-based inhibition motif (ITIM) in its cytoplasmic tail. The ITIM was not necessary for activation of lysis by KIR2DL4. The activation signal of KIR2DL4 was sensitive to inhibition by another ITIM-containing receptor. The activation-deficient mutant of KIR2DL4 inhibited the signal delivered by the activating receptor CD16.

Reference

Selvakumar A. et al., 1997, Tissue Antigens. 48 (4 Pt 1): 285-94.
Selvakumar A. et al., 1997, Immunol Rev. 155: 183-96.Selvakumar A. et al., 1997, Tissue Antigens. 49 (6): 564-73.

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