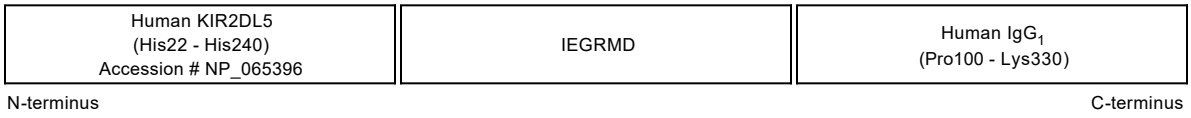
Recombinant Human KIR2DL5/CD158f Fc Chimera

Catalog Number: 6634-KR

DESCRIPTION

Source

Mouse myeloma cell line, NS0-derived



N-terminal Sequence Analysis	His22
Structure / Form	Disulfide-linked homodimer
Predicted Molecular Mass	50.1 kDa (monomer)

SPECIFICATIONS

SDS-PAGE	66 kDa, reducing conditions
Activity	Measured by its ability to bind HLA on MDA-MB-231 human breast cancer cells. The ED_{50} for this effect is 0.9-3.6 µg/mL. **Optimal dilutions should be determined by each laboratory for each application.**
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 300 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 3 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

KIR2DL5 (2DL5, designated CD158f) is a 60 kDa type I transmembrane glycoprotein that belongs to the killer cell Ig-like receptor (KIR) family (1, 2). KIRs are expressed on $CD56^{dim}$ NK cells and T cell subsets where they regulate effector functions in the innate immune system (1 - 3). KIRs are named for the number of Ig-like domains (2D or 3D) in the extracellular domain (ECD), and whether they have long or short (L, S) cytoplasmic tails (3). Like other inhibiting KIRs, KIR2DL5 has two ITIM domains within its long tail; however, one of these is atypical and may cause KIR2DL5 to be less inhibitory than most inhibiting KIRs (4). Gene duplication is thought to have resulted in individual genes coding for KIR2DL5 A and B proteins that vary by only 2 amino acids (5). Individuals may express either KIR2DL5A or KIR2DL5B, both proteins, or neither protein (5). Within the KIR family, KIR2DL5 and KIR2DL4 form a subfamily. The two share 79% amino acid sequence identity, have longer cytoplasmic tails than other KIR, and each has one D0 and one D2-type Ig-like domain (1). However, KIR2DL5 is only inhibitory, while KIR2DL4 has characteristics of both activating and inhibiting KIR.

References:

1. Vilches, C. *et al.* (2000) J. Immunol. **164**:5797.
2. Estefania, E. *et al.* (2007) J. Immunol. **178**:4402.
3. Lanier, L. L. (2005) Annu. Rev. Immunol. **23**:225.
4. Yusa, S. *et al.* (2004) J. Immunol. **172**:7385.
5. Gomez-Lozano, N. *et al.* (2002) Immunogenetics **54**:314.

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