

KIR2DL3 (D8L3D) Rabbit mAb

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Applications: FC-L	Reactivity: H	Sensitivity: Endogenous	MW (kDa): 60	Source/Isotype: Rabbit IgG	UniProt ID: #P43628	Entrez-Gene Id: 3804
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Product Usage Information**Application**

Flow Cytometry (Live)

Dilution

1:100

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

KIR2DL3 (D8L3D) Rabbit mAb recognizes endogenous levels of total KIR2DL3 protein. This antibody weakly cross-reacts with KIR2DL2 proteins in over-expression cell lines.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Ala173 of human KIR2DL3 protein.

Background

Killer cell immunoglobulin-like receptors (KIRs) are type 1 transmembrane glycoproteins expressed by natural killer (NK) cells and subsets of CD4, CD8, and γδ T cells (1-5). Analogous to the diversity of their human leukocyte antigen class I (HLA class I) ligands, the KIR genes are polymorphic and the content of the KIR gene cluster varies among haplotypes, although several "framework" genes are found in all haplotypes (6,7). The KIR proteins are characterized by the number of extracellular immunoglobulin-superfamily domains (2D or 3D) and by whether they have a long (L) or short (S) cytoplasmic domain (8-10). KIR proteins with the long cytoplasmic domain transduce inhibitory signals upon ligand binding via an immune tyrosine-based inhibitory motif (ITIM) (10), while KIR proteins with the short cytoplasmic domain lack an ITIM and instead transduce activating signals (11,12). KIR proteins play an important role in the regulation of the immune response. Combinations of KIR and HLA class I variants influence susceptibility to autoimmunity and infectious disease, as well as outcomes of haematopoietic stem cell transplantation (12-14).

KIR2DL3, also referred to as CD158b, interacts with HLA-C alleles (HLA-Cw1, HLA-Cw3, and HLA-Cw7). Upon receptor ligand interaction, KIR2DL3 inhibits the activity of NK cells thus preventing target cell lysis (15-17).

Background References

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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Applications Key

FC-L: Flow Cytometry (Live)

Cross-Reactivity Key

H: Human

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