Human KIR3DL1 Antibody  
Monoclonal Mouse IgG1 Clone # DX9  
Catalog Number: MAB1225

**DESCRIPTION**

**Species Reactivity** Human


**Source** Monoclonal Mouse IgG, Clone # DX9

**Purification** Protein A or G purified from hybridoma culture supernatant

**Immunogen** Human KIR3DL1-expressing NK cell clone

**Formulation** Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

**APPLICATIONS**

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

<table>
<thead>
<tr>
<th>Recommended Concentration</th>
<th>Sample</th>
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<tbody>
<tr>
<td>0.25 µg/10^6 cells</td>
<td>Human whole blood CD56* natural killer cells</td>
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<tr>
<td>20 to 70 °C</td>
<td></td>
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<tr>
<td>1 month, 2 to 8 °C</td>
<td>under sterile conditions after reconstitution.</td>
</tr>
<tr>
<td>6 months, -20 to -70 °C</td>
<td>under sterile conditions after reconstitution.</td>
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</table>

**PREPARATION AND STORAGE**

**Reconstitution** Reconstitute at 0.5 mg/mL in sterile PBS.

**Shipping** The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

**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.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

**BACKGROUND**

KIR3DL1 (3DL1, previously called NK1B1 or NKAT3, designated CD158e) is a 70 kDa type I transmembrane glycoprotein that belongs to the killer cell Ig-like receptor (KIR) family. KIRs are expressed on CD56dim 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. Like other inhibiting KIRs, KIR3DL2 has two ITIM domains within its long tail (2). The 319 amino acid (aa) ECD of KIR3DL2 shares 40% aa identity with mouse, rat and bovine KIR3DL1, the transmembrane and cytoplasmic regions in the non-primate species are highly polymorphic, and specific KIR3DL1 alleles vary in surface expression and activity. For example, the allele KIR3DL1*004 is associated with slow progression to AIDS in HIV infected individuals that also express Bw4 (6). Unlike most alleles that are surface-expressed, this allele is mainly retained within the cell (7). KIR3DL1/S1 is the only KIR receptor to have an ortholog in non-primate species, including selected mouse strains in which it is also called KIRL1 (KIR-like 1). Although the ECD of human KIR3DL1 shares 40-48% aa identity with mouse, rat and bovine KIR3DL1, the transmembrane and cytoplasmic regions in the non-primate species show no obvious activating or inhibiting motifs (8, 9).

**References:**