

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human SIGIRR in direct ELISAs and Western blots. In direct ELISAs, less than 2% cross-reactivity with recombinant human (rh) IL-1 R9, rhIL-1 R1, rhIL-1 R2, rhIL-1 R3, rhIL-1 R6, rhIL-1 R7, rhIL-1 R8, and rhIL-18 R is observed.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human SIGIRR Met1-His118 Accession # Q6IA17
<b>Formulation</b>	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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.1 µg/mL	Recombinant Human SIGIRR Fc Chimera (Catalog # 990-SG)

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

The Interleukin 1 receptor family (IL-1 R) comprises at least eleven members including IL-1 RI (IL-1 R1), IL-1 RII (IL-1 R2), IL-1 RAcP (IL-1 R3), ST2 (T1/IL-1 R4), IL-18 Ra (IL-1 Rrp/IL-1 R5), IL-1 Rrp2 (IL-1 RL2/IL-1 R6), IL-18 Rb (AcPL/IL-1 R7), IL-1RAPL-1 (TIGIRR-2/IL1RAPL1), and TIGIRR-1 (IL-1 R9) (1). All family members possess three immunoglobulin (Ig)-like domains in their extracellular region. Most members have an intracellular TIR (Toll-like receptor/IL-1 receptor signaling) domain that is also conserved in the Toll-like receptor family. Five of the IL-1 R family members (1, 2, 4, 5, and 6) are clustered and localized to chromosome 2. SIGIRR (single Ig domain containing IL-1 receptor-related molecule) is a subtype of the IL-1 R family that differs from the other nine members by having only one Ig domain in its extracellular region. The sequence of human SIGIRR predicts a 410 amino acid (aa) residue transmembrane glycoprotein that lacks signal peptide and contains a 118 aa single Ig extracellular domain, a transmembrane region and a 268 aa cytoplasmic tail with a TIR domain. The cytoplasmic tail of SIGIRR contains a C-terminal extension beyond the TIR domain which is also found in IL1RAPL1, IL-1 R9, and Toll-like receptor family members but absent in other IL-1 receptor family members. SIGIRR is widely expressed and is present in all cells and tissues examined. Mouse and human SIGIRR share 82% amino acid sequence identity. The ligand and signaling mechanism for SIGIRR has not been identified.

**References:**

1. Thomassen, E. *et al.* (1999) *Cytokine* 11:389.