

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human SIGIRR in Western blots. In Western blots, less than 5% cross-reactivity with recombinant human (rh) IL-1 RI, rhIL-1 RII, rhIL-18 R, rhIL-18 R β , and rhIL-1 RAcP is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human SIGIRR Met1-His118 Accession # Q6IA17
Formulation	Lyophilized from a 0.2 μ m filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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.

	Recommended Concentration	Sample
Western Blot	0.1 μ g/mL	Recombinant Human SIGIRR Fc Chimera (Catalog # 990-SG)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> • 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

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.