

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse SIGIRR in direct ELISAs and Western blots. In direct ELISAs, this antibody does not cross-react with recombinant mouse (rm) IL-1 R1, rmlIL-1 R2, rhIL-1 RAcP, recombinant human (rh) IL-1 R4, rmlIL-18 R, recombinant rat IL-1 R6, rmlIL-1 R7, rhIL-1 R8, rhIL-1 R9, or rhSIGIRR.
Source	Monoclonal Rat IgG ₁ Clone # 161917
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse SIGIRR Met1-His117 Accession # Q9JLZ8
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. 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	1 µg/mL	Recombinant Mouse SIGIRR Fc Chimera (Catalog # 992-SG) under non-reducing conditions only

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.
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 from date of receipt, 2 to 8 °C, reconstituted. ● 6 months from date of receipt, -20 to -70 °C, reconstituted.

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 R α (IL-1 Rrp/IL-1 R5), IL-1 Rrp2 (IL-1 RL2/IL-1 R6), IL-18 R β (AcPL/IL-1 R7), IL-1RACL-1 (TIGIRR-2/IL-1 R8), 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 mouse SIGIRR predicts a 409 amino acid (aa) residue transmembrane glycoprotein that lacks signal peptide and contains a 117 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 IL-1 R8, 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.