

DESCRIPTION

Source	Mouse myeloma cell line, NS0-derived mouse SIGIRR protein		
	Mouse SIGIRR (Met1 - His117) Accession # Q9JLZ8	IEGRMD	Human IgG ₁ (Pro100 - Lys330)
	N-terminus		C-terminus
N-terminal Sequence	Met1		
Analysis			
Structure / Form	Disulfide-linked homodimer		
Predicted Molecular Mass	39 kDa (monomer)		

SPECIFICATIONS

SDS-PAGE	63 kDa, reducing conditions
Activity	Bioassay data are not available.
Endotoxin Level	<0.01 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE under reducing conditions and visualized by silver stain.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 100 µg/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. • 3 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 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 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.