

**DESCRIPTION**

<b>Source</b>	Mouse myeloma cell line, NS0-derived human TSLPR protein		
	Human TSLPR (Gly25-Lys231) Accession # Q9HC73.1	DIEGRMD	Human IgG <sub>1</sub> (Pro100-Lys330)
	N-terminus		C-terminus
<b>N-terminal Sequence Analysis</b>	Gly25		
<b>Structure / Form</b>	Disulfide linked homodimer. Labeled with Alexa Fluor® 647 via amines. Excitation Wavelength: 650 nm Emission Wavelength: 668 nm		
<b>Predicted Molecular Mass</b>	51 kDa (monomer)		

**SPECIFICATIONS**

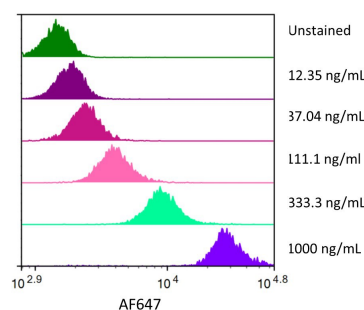
<b>SDS-PAGE</b>	65-75 kDa, reducing conditions.
<b>Activity</b>	Measured by flow cytometry for its ability to bind anti-human TSLPR Monoclonal Antibody conjugated beads. The concentration of Recombinant Human TSLPR Fc Chimera Alexa Fluor® 647 (Catalog # AFR981) that produces 50% of the binding response is 5.00-50.0 ng/mL
<b>Endotoxin Level</b>	<1.0 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Formulation</b>	Supplied as a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

<b>Shipping</b>	The product is shipped with dry ice or equivalent. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<b>Protect from light. Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>6 months from date of receipt, -20 to -70 °C as supplied.</li> <li>1 month, 2 to 8 °C under sterile conditions after opening.</li> <li>3 months, -20 to -70 °C under sterile conditions after opening.</li> </ul>

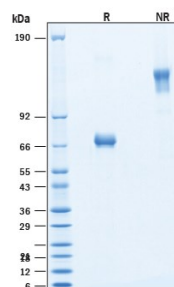
**DATA**

**Flow Cytometry**



**Flow cytometry analysis for Recombinant Human TSLPR Fc Chimera Alexa Fluor® 647 staining on anti-human TSLPR Monoclonal Antibody conjugated beads.** Streptavidin coated beads conjugated to biotinylated anti-human TSLPR Monoclonal Antibody were stained with the indicated concentrations of Recombinant Human TSLPR Fc Chimera Alexa Fluor® 647 (Catalog # AFR981).

**SDS-PAGE**



**Recombinant Human TSLPR Fc Chimera Alexa Fluor® 647 Protein SDS-PAGE.** 2 µg/lane of Recombinant Human TSLPR Fc Chimera Alexa Fluor® 647 Protein (Catalog # AFR981) was resolved with SDS-PAGE under reducing (R) and nonreducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 65-75 kDa and 130-150 kDa, respectively.

### BACKGROUND

TSLPR, also named Delta (1) and CRLM-2 (2) (cytokine receptor-like module-2), was originally cloned as a novel type 1 cytokine receptor with similarity to the common gamma chain. It was subsequently identified to be a subunit of the cellular receptor for the IL-7-like cytokine TSLP and termed TSLPR (3). The human TSLPR cDNA encodes a 371 amino acid (aa) residue type 1 membrane protein with a 22 aa residue signal peptide, a 210 aa residue extracellular domain, a 20 aa residue transmembrane domain, and a 119 aa residue cytoplasmic domain (4, 5). The extracellular region contains two fibronectin type III-like domains and a WSXWS-like motif. The cytoplasmic domain contains a membrane-proximal box 1 motif that is known to be important for association with JAKs (4). Human TSLPR displays 39% identity to mouse TSLPR and 24% identity to the common gamma receptor (4). An alternatively spliced mRNA variant encoding a soluble TSLPR has also been reported in mouse (2). TSLPR expression is ubiquitous in the immune and hematopoietic cells, but is up-regulated in Th2-skewed cells. Cells expressing TSLPR alone bind TSLP with low affinity. Co-expression of TSLPR and IL-7 R $\alpha$  is required for high-affinity TSLP binding and signal transduction (3-6). The TSLPR and IL-7 R $\alpha$  are co-expressed primarily on monocytes and dendritic cells and at lower levels in lymphoid cells. TSLP has been shown to induce the release of T cell-attracting chemokines from monocytes and enhance the maturation of CD11c<sup>+</sup> dendritic cells (5).

### References:

1. Fujio, K. *et al.* (2000) *Blood* **95**:2204.
2. Hiroyama, T. *et al.* (2000) *Biochem. Biophys. Res. Commun.* **272**:224.
3. Park, L.S. *et al.* (2000) *J. Exp. Med.* **192**:659.
4. Tonozuka, Y. *et al.* (2001) *Cytogenet. Cell Genet.* **93**:23.
5. Reche, P.A. *et al.* (2001) *J. Immunol.* **167**:336.
6. Pandey, A. *et al.* (2000) *Nat. Immunol.* **1**:59.

### PRODUCT SPECIFIC NOTICES

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