

**DESCRIPTION**

<b>Source</b>	Mouse myeloma cell line, NS0-derived		
	Mouse TSLP R (Ala20 - Leu233) Accession # BAA92159	DIEGRMD	Human IgG <sub>1</sub> (Pro100 - Lys330)
	N-terminus		C-terminus

<b>N-terminal Sequence Analysis</b>	Ala20
<b>Structure / Form</b>	Disulfide-linked homodimer
<b>Predicted Molecular Mass</b>	49.3 kDa (monomer)

**SPECIFICATIONS**

<b>SDS-PAGE</b>	65 - 80 kDa, reducing conditions
<b>Activity</b>	Measured by its ability to inhibit TSLP-dependent proliferation of BaF3 mouse pro-B cells transfected with mouse IL-7 Ra. The ED <sub>50</sub> for this effect is 2-8 µg/mL in the presence of 7.5 ng/mL of rmTSLP.
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>90%, by SDS-PAGE under reducing conditions and visualized by silver stain.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 500 µg/mL in sterile PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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>● 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**BACKGROUND**

TSLP R, 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 TSLP R (3). The TSLP R cDNA encodes a 359 amino acid (aa) residue type 1 membrane protein with a 24 aa residue signal peptide, a 206 aa residue extracellular domain that showed 24% sequence identity with the mouse common γ receptor, a 23 aa residue transmembrane domain, and a 106 aa residue cytoplasmic domain. The cytoplasmic domain of TSLP R contains a membrane-proximal box1 motif which is known to be important for association with JAKs. An alternatively spliced mRNA variant encoding a soluble TSLP R has also been reported (2). TSLP R expression is ubiquitous in the immune and hematopoietic cells, but is up-regulated in Th2-skewed cells. Cells expressing TSLP R alone bind TSLP with low affinity. Co-expression of TSLP R and IL-7 Ra is required for high-affinity TSLP binding and signal transduction (3, 4).

**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. Pandey, A. *et al.* (2000) *Nat. Immunol.* **1**:59.