

## Product Information

<b>Description:</b>	Recombinant human TSLPR (thymic stromal lymphopoietin receptor), encompassing amino acids 25-231. This construct contains a C-terminal Fc domain (IgG1). This protein was affinity purified.
<b>Background:</b>	TSLPR (thymic stromal lymphopoietin receptor) is part of the heterodimeric receptor for TSLP. The heterodimeric receptor is composed of TSLP-R (CRLF2, cytokine receptor like factor 2) and IL7Ra (CD127), and binding of TSLP leads to downstream activation of JAK2 (janus kinase 2)/STAT5 (signal transducer and activator of transcription 5) signaling. TSLP is a protein that functions as a type I cytokine, as an alarmin and growth factor in the immune system. It is involved in type 2 immune responses, T <sub>H</sub> 2 (T helper 2 cells) responses, and the maturation and recruitment of dendritic cells (DCs), T cells, B cells, neutrophils, mast cells, and other lymphoid cells. It can be produced by epithelial and stromal cells in lung, skin, and gastric system, but also by DCs, basophils and mast cells. Its expression can be induced by infections, pro-inflammatory cytokines, proteases, and even mechanical injury. For instance, it can be produced in the lungs in response to infection with influenza or rhinovirus. Its role as alarmin can result in increasing inflammation. TSLP is linked to allergic reactions such as asthma, atopic dermatitis, and food allergies, by inducing the expression of OX40L, CD80 and CD86 and stimulating CD4 <sup>+</sup> T cells. In 2021, the TSLP-neutralizing antibody tezepelumab was approved for the treatment of severe asthma. Targeting TSLP and TSLPR is an active area of investigation with ongoing clinical trials for the treatment of autoimmune disorders.
<b>Species:</b>	Human
<b>Construct:</b>	TSLPR (25-231-Fc(IgG1))
<b>Concentration:</b>	0.55 mg/ml
<b>Expression System:</b>	HEK293
<b>Purity:</b>	≥90%
<b>Format:</b>	Aqueous buffer solution.
<b>Formulated In:</b>	8 mM phosphate, pH 7.4, 110 mM NaCl, 2.2 mM KCl, and 20% glycerol
<b>MW:</b>	51 kDa + glycans
<b>Glycosylation:</b>	This protein runs at a higher MW by SDS-PAGE due to glycosylation.
<b>Genbank Accession:</b>	NM_022148.4
<b>Stability:</b>	At least 6 months at -80°C.
<b>Storage:</b>	-80°C
<b>Instructions for Use:</b>	Thaw on ice and gently mix prior to use. DO NOT VORTEX. Perform a quick spin before opening. Aliquot into small volumes and flash freeze for long term storage. Avoid multiple freeze/thaw cycles.
<b>Applications:</b>	Useful for SDS-PAGE and binding studies.

## Quality Control Data

### 4-20% SDS-PAGE Coomassie Staining

