Recombinant Human TSLP protein

Cat. No. TSLP-312H **Lot. No.** (See product label)

SPECIFICATION

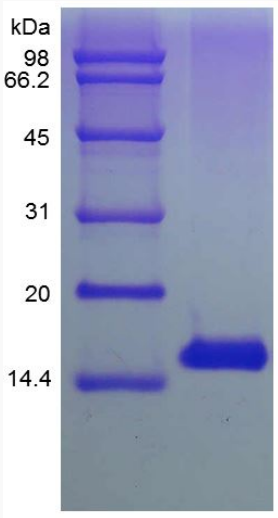
Product Overview	Recombinant Human TSLP protein was expressed in Escherichia coli.
Species	Human
Source	E.coli
ProteinLength	132
Description	Thymic stromal lymphopoietin (TSLP) is a hemopoietic protein belonging to the cytokine family and is known to play an important role in the maturation of T cell populations through activation of antigen presenting cells. It is mainly expressed in a number of tissues including heart, liver and prostate. TSLP signals through a heterodimeric receptor complex composed of the thymic stromal lymphopoietin receptor and the IL-7R alpha chain. After binding STAT5 phosphorylation is induced resulting in the expression of downstream transcription factors. Like IL-7, TSLP induces phosphorylation of STAT3 and STAT5, but uses kinases other than the JAKs for activation. TSLP has the functions of enhancing the maturation of CD11c+ dendritic cells and inducing allergic inflammation by directly activating mast cells. It expression is linked to many disease states including asthma, inflammatory arthritis, atopic dermatitis, and eczema and other allergic states. But the factors inducing the activation of TSLP release are not clearly defined. Human TSLP shares approximately 43 % a.a. sequence identity with mouse TSLP.
Form	Lyophilized from a 0.2μm filtered concentrated solution in 20 mM PB, pH 7.4, 150 mM

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	NaCl.
Bio-activity	Fully biologically active when compared to standard. The ED50 as determined by a cell proliferation assay using human IL-7Rα and human TSLP R co-transfected murine BaF3 pro-B cells is less than 0.3 ng/ml, corresponding to a specific activity of > 3.3×10^6 IU/mg.
Molecular Mass	Approximately 15.1 kDa, a single non-glycosylated polypeptide chain containing 132 amino acids.
AA Sequence	MYDFTNCDFEKIKAAYLSTISKDLITYMSGTKSTEFNNTVSCSNRPHCLTEIQSLTFNP TAGCASLAKEMFAMKTKAALAIWCPGYSETQINATQAMKKRRKRKVTTNKCLEQVS QLQGLWRRFNRPLLKQQ
Endotoxin	Less than 1 EU/μg of rHuTSLP as determined by LAL method.
Purity	>98% by SDS-PAGE and HPLC analysis.
Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 12 months from date of receipt, -20 to -70 centigrade as supplied. 1 month, 2 to 8 centigrade under sterile conditions after reconstitution. 3 months, -20 to -70 centigrade under sterile conditions after reconstitution.
Reconstitution	We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/mL. Stock solutions should be apportioned into working aliquots and stored at ≤-20 centigrade. Further dilutions should be made in appropriate buffered solutions.

GENE INFORMATION

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Gene Name	TSLP
Official Symbol	TSLP
Synonyms	TSLP; thymic stromal lymphopoietin;
Gene ID	85480
mRNA Refseq	NM_033035
Protein Refseq	NP_149024
MIM	607003
UniProt ID	Q969D9
SDS-PAGE of TSLP-312H	

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