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TSLP Human

Thymic Stromal Lymphopoietin Human Recombinant
CYK0615

Product Overview

Name	TSLP Human
Description	
Thymic Stromal Lymphopoietin Human Recombinant	
Accession (Primary)	Q969D9
Synonyms	
Thymic Stromal Lymphopoietin, TSLP.	
Introduction	
TSLP protein is a hemopoietic cytokine which signals throughout a heterodimeric receptor complex composed of the thymic stromal lymphopoietin receptor & the Interleukin-7 receptor alpha chain. TSLP impacts myeloid cells thus induces the discharge of T cell-attracting chemokines from monocytes & increases the growth of CD11c(+) dendritic cells. TSLP is mainly expressed in the heart, liver and prostate. TSLP is related in its biological activities with IL-7 and binds with the heterodimeric receptor complex consisting of the Interleukin-7 receptor alpha chain & the TSLPR. Similar to IL-7, TSLP enhances phosphorylation of STAT3 and STAT5, though uses kinases excluding JAKs for its activation. TSLP induces the release of T cell-attracting chemokines such asTARC & MDC from monocytes & triggers CD11c(+) dendritic cells. TSLP activated dendritic cells primes naive T cells to manufacture pro-allergic cytokines such as Iinterleukin-4, Interleukin-5, Interleukin-13 and TNF-alpha whereas down-regulating Interleukin-10 and IFN-gamma play a role in the initiation of allergic inflammation.	
Source	
Escherichia Coli.	
Physical Appearance	
Sterile Filtered White lyophilized (freeze-dried) powder.	
Formulation	
Lyophilized from a concentrated solution (1mg/ml) contains 130mM NaCl, and 20mM sodium phosphate, pH 7.4.	
Stability	
Lyophilized TSLP although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution TSLP should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.	
Purity	

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Greater than 97.0% as determined by: (a) Analysis by RP-HPLC. (b) Analysis by SDS-PAGE.

Amino acid sequence

MYDFTNCDFE KIKAAYLSTI SKDLITYMSG TKSTEFNNTV SCSNRPHCLT EIQSLTFNPT AGCASLAKEM FAMKTKAALA IWCPGYSETQ INATQAMKKR RKRKVTTNKC LEQVSQLQGL WRRFNRPLLK QQ.

Biological Activity

The ED50 is determined by the ability to induce proliferation of human Interleukin-7 receptor alpha & human TSLP Receptor co-transfected with mouse BaF3 cells which was found to be less than 0.3ng/ml.

Solubility

It is recommended to reconstitute the lyophilized TSLP in sterile 18MΩ-cm H2O not less than 100 µg/ml, which can then be further diluted to other aqueous solutions.

Precautions

TSLP Human is for research use only and not for use in diagnostic or therapeutic procedures.

Target Information: (Q969D9)