

Recombinant Human Thymic Stromal Lymphopoietin (Human TSLP)

Product Information

Product Name	Cat#	Size
Recombinant Human Thymic Stromal Lymphopoietin (Human TSLP)	92253ES10	10 µg
	92253ES60	100 µg
	92253ES76	500 µg

Product Description

Thymic stromal lymphopoietin (TSLP) is an interleukin 7 (IL-7)-like cytokine originally characterized by its ability to promote the activation of B cells and dendritic cells (DCs). Both mouse TSLP and IL-7 can co-stimulate growth of thymocytes and mature T cells, and support B lymphopoiesis in long-term cultures of fetal liver cells and bone-marrow cells. Whereas mouse IL-7 facilitates the development of B220+/IgM- pre-B cells, mouse TSLP promotes the development B220+/IgM+ B cells. Human TSLP was reported to preferentially stimulate myeloid cells; inducing the release of T cell-attracting chemokines from monocytes and enhancing the maturation of CD11c+ dendritic cells. Thymic stromal lymphopoietin (TSLP) is a cytokine expressed by epithelial cells, including keratinocytes, and is important in allergic inflammation. Subsequent studies have shown that TSLP promotes T helper type 2 (TH2) cell responses associated with immunity to some helminth parasites and the pathogenesis of many inflammatory diseases, including atopic dermatitis and asthma. TSLP can promote TH2 cytokine-associated inflammation by directly promoting the effector functions of CD4+ TH2 cells, basophils and other granulocyte populations while simultaneously limiting the expression of DC-derived proinflammatory cytokines and promoting regulatory T cell responses in peripheral tissues.

Product Properties

Synonyms	thymic stromal lymphopoietin
Accession	Q969D9
GeneID	85480
Source	E.coli-derived Human TSLP, Tys29-Gln159, with an N-terminal Met.
Molecular Weight	Approximately 15.1 kDa.
AA Sequence	MYDFTNCDFE KIKAAYLSTI SKDLITYMSG TKSTEFNNTV SCSNRPHCLT EIQSLTFNPT AGCASLAKEM FAMKTKAALA IWCPGYSETQ INATQAMKKR RKRKVTTNKC LEQVSQLQGL WRRFNRPLLK QQ
Tag	None
Physical Appearance	Sterile Filtered White lyophilized (freeze-dried) powder.
Purity	> 98% by SDS-PAGE and HPLC analyses.
Biological Activity	The ED ₅₀ as determined by a cell proliferation assay using human IL-7R α 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 $\times 10^6$ IU/mg. Fully biologically active when compared to standard.
Endotoxin	< 1.0 EU per 1µg of the protein by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in 20 mM PB, pH 7.4, 150 mM NaCl. We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom.
Reconstitution	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 $\leq -20^\circ\text{C}$. Further dilutions should be made in appropriate buffered solutions.

Shipping and Storage

The products are shipped with ice pack and can be stored at -20°C to -80°C for 1 year.

Recommend to aliquot the protein into smaller quantities when first used and avoid repeated freeze-thaw cycles.

Cautions

1. Avoid repeated freeze-thaw cycles.
2. For your safety and health, please wear lab coats and disposable gloves for operation.
3. For research use only.