Recombinant Human Thymic stromal lymphopoietin is produced by our E.coli expression system and the target gene encoding Tyr29-Gln159 is expressed.

**Accession #:** Q969D9  
**Known as:** Thymic stromal lymphopoietin; TSLP

**FORMULATION**
Lyophilized from a 0.2 μm filtered solution of PBS, pH7.4.

**SHIPPING**
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature listed below.

**STORAGE**
Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.

**RECONSTITUTION**
Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100μg/ml. Dissolve the lyophilized protein in distilled water. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**QUALITY CONTROL**
Purity: Greater than 95% as determined by reducing SDS-PAGE.  
Endotoxin: Less than 0.1 ng/μg (1 IEU/μg).

**AMINO ACID SEQUENCE**
YDFTNCDFEKIKAAYLSTISKDLITYMSGTKSTEFNSTCSRPHCLTEIQSLTFNPTAGCASLAKEMFAMKTKAALAIWCPGYS
ETQINATQAMKKRRKVTTNKCLEQVSQILWRRFRNPRLLKQQ

**BACKGROUND**
Thymic stromal lymphopoietin (TSLP) is a novel member of the hemopoietic cytokine family that promotes the development of B cells and shares overlapping activity with IL-7. The human TSLP protein comprises a 28 amino acids (aa) signal sequence and 131 aa mature region. Human TSLP has two isoforms IFTSLP and sfTSLP produced by alternative splicing. IFTSLP is expressed in a number of tissues including heart, liver and prostate, and sfTSLP (63aa) is predominantly expressed in keratinocytes of oral mucosa, skin and in salivary glands. In aa sequence level, Human TSLP displays about 43% identity with mouse TSLP. TSLP is a cytokine that functions mainly on myeloid cells; it induces the release of T cell-attracting chemokines from monocytes and enhances the maturation of CD11c(+) dendritic cells. TSLP has proliferative effects on the myeloid cell line and may initiate asthma or atopic dermatitis responses by directly activating mast cells. TSLP signals cells via the interleukin-7 receptor-α chain (IL-7Rα), shared with IL-7, together with the TSLP receptor (TSLPR) subunit. Recent studies indicate that TSLP and its receptor are novel therapeutic targets for rheumatoid arthritis, for increased intraarticular TSLP concentrations in patients has caused chemotaxis and activation of arthritogenic T cells.