

TSLP

Catalog # PVGS1062

Product Information

Primary Accession Q969D9
Species Human

Sequence Tyr29-Gln159, expressed with an N-terminal Met

Purity > 98% as analyzed by SDS-PAGE

> 98% as analyzed by HPLC

Endotoxin Level

Biological 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 $> 3.3 \times 10^6$ IU/mg.

Expression System E. coli

Theoretical Molecular Weight 15.1 kDa

Formulation Lyophilized from a 0.2 Im filtered solution in 20 mM PB, pH 7.4, 150 mM

NaCl.

Reconstitution It is recommended that this vial be briefly centrifuged prior to opening to

bring the contents to the bottom. Reconstitute the lyophilized powder in sterile distilled water or aqueous buffer containing 0.1 % BSA to a

concentration of 0.1-1.0 mg/ml.

Storage & Stability Upon receiving, this product remains stable for up to 6 months at -70°C or

-20°C. Upon reconstitution, the product should be stable for up to 1 week at

4°C or up to 3 months at -20°C. Avoid repeated freeze-thaw cycles.

Additional Information

Gene ID 85480

Other Names Thymic stromal lymphopoietin, TSLP

Target BackgroundTSLP is a hemopoietic protein that is expressed in the heart, liver and

prostate. TSLP overlaps biological activities with IL-7 and binds with the heterodimeric receptor complex consisting of the IL-7R alpha chain (IL-7Rα) and the TSLP-specific chain (TSLPR). Like IL-7, TSLP induces phosphorylation of STAT3 and STAT5, but uses kinases other than the JAKs for activation. TSLP prohibited apoptosis and stimulated growth of the human acute myeloid leukemia (AML)-derived cell line MUTZ3. It induces the release of T cell-attracting chemokines TARC and MDC from monocytes and activates CD11c(+) dendritic cells (DCs). TSLP activated DCs primed naive T cells to

produce the proallergic cytokines (IL-4, IL-5, IL-13, TNF α) while down-regulating IL-10 and IFN- γ suggesting a role in initiating allergic inflammation.

Protein Information

Name TSLP

Function [Isoform 1]: Cytokine that induces the release of T-cell- attracting

chemokines from monocytes and, in particular, enhances the maturation of

CD11c(+) dendritic cells. Can induce allergic inflammation by directly

activating mast cells.

Cellular Location Secreted.

Tissue Location Isoform 1 is expressed in a number of tissues including heart, liver and

prostate. Isoform 2 is the predominant form in keratinocytes of oral mucosa,

skin and in salivary glands. It is secreted into saliva.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.