

Rev03
Update: Dec,14,2021

DATASHEET

TSLP, Human

Cat. No.: Z02721

Product Introduction

Species	Human
Protein Construction	Expressed with an N-terminal Met. TSLP (Tyr29-Gln159) Accession # Q969D9
Purity	> 98% as analyzed by SDS-PAGE > 98% as analyzed by HPLC
Endotoxin Level	< 1 EU/ μ g of protein by LAL method
Biological Activity	Fully biologically active when compared to standard. 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.
Expression System	E. coli
Theoretical Molecular Weight	15.1 kDa
Formulation	Lyophilized from a 0.2 μ m 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.

Background

Target Background : TSLP 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-7R α) 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.

Synonyms : TSLP; thymic stromal lymphopoietin

For laboratory research use only. Direct human use, including taking orally and injection and clinical use are forbidden.