

Mouse TSLP Recombinant Protein

Catalog Number: 14-8498

Also Known As: Thymic Stromal-Derived Lymphopoietin

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Contents: Mouse TSLP Recombinant Protein

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Handling Conditions: For best recovery, quick-spin vial prior to opening. Use in a sterile environment

Source: Insect cell expressed N-terminal His-Tagged amino acids Tyr20-Glu140 of mTSLP (accession #NM_021367).

Molecular Mass: 15-22 kDa on SDS-PAGE due to glycosylation.

Purity: Greater than 99%, as determined by SDS-PAGE.

Endotoxin Level: Less than 0.01 ng/ug cytokine as determined by the LAL assay.

Bioactivity: The ED₅₀ tested in a Nag8/7 cell proliferation assay was 0.15 ng/ml, corresponding to a specific activity of approximately 6x10⁶ Units/mg.

Formulation: Sterile liquid; 20 mM NaH₂PO₄, 0.15M NaCl, pH 7.2 with 1.0% BSA. 0.22 µm filtered.



Temperature Limitation: Store at less than or equal to -70°C.



Batch Code: Refer to Vial



Use By: Refer to Vial

Description

Thymic Stromal Lymphopoietin (TSLP) is a member of the B cell-stimulating factor family. Originally identified from the conditioned medium of a mouse thymic stromal cell line that promoted B-cell development, TSLP is expressed in thymus, spleen, kidney, lung, and bone marrow. TSLP activity overlaps with that of IL-7, playing a key role in the development of B cells, as well as stimulating the growth of thymocytes and T cells. TSLP stimulates monocytes to produce T cell-attracting chemokines such as TARC (CCL17) and MDC (CCL22). TSLP also activates dendritic cell-primed CD4 T cells to produce Th2 cytokines, including IL-4, IL-5, IL-13, and TNFα. This hematopoietic cytokine binds to a heterodimeric receptor complex consisting of the IL-7R alpha chain (IL-7Rα) and the TSLP-specific chain (TSLPR). Binding induces activation of STAT3 and STAT5 via phosphorylation. Mouse TSLP shares approximately 43% amino acid sequence identity with human TSLP. Recombinant mouse TSLP is a 15.0 kDa protein consisting of 121 amino acid residues.

Applications Reported

Recombinant mouse TSLP is biologically active.

Applications Tested

This recombinant mouse TSLP has been tested in a Nag8/7 cell proliferation assay with an observed ED₅₀ of 0.15 ng/ml, corresponding to a specific activity of approximately 6x10⁶ Units/mg.

References

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Related Products

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