

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse TSLP in ELISAs and Western blots. In sandwich immunoassays, less than 0.05% cross-reactivity with recombinant human (rh) TSLP, rhTSLP R, and recombinant mouse TSLP R is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant mouse TSLP (R&D Systems, Catalog # 555-TSB) Tyr20-Glu140 Accession # Q9JIE6
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Mouse TSLP (Catalog # 555-TS)
Mouse TSLP Sandwich Immunoassay		Reagent
ELISA Capture	2-8 µg/mL	Mouse TSLP Antibody (Catalog # MAB5551)
ELISA Detection	0.1-0.4 µg/mL	Mouse TSLP Biotinylated Antibody (Catalog # BAF555)
Standard		Recombinant Mouse TSLP (Catalog # 555-TS)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Thymic Stromal Lymphopoietin (TSLP) was originally identified as an activity from the conditioned medium of a mouse thymic stromal cell line that promoted the development of B cells. The activities of mouse TSLP overlap with, but are distinct from, those of mouse IL-7. 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. Mouse TSLP cDNA encodes a 140 amino acid (aa) residue precursor protein with a 19 aa signal sequence. Within the mature region, there are three potential N-glycosylation sites and 7 cysteine residues. Mouse TSLP shares approximately 43% aa sequence identity with human TSLP. The gene for mouse TSLP has been localized to chromosome 18. By Northern and RT-PCR analysis, mouse TSLP expression has been detected in spleen, thymus, kidney, lung and bone marrow. TSLP is proposed to signal through a heterodimeric receptor complex that consists of IL-7 R α and the TSLP R, a new member of the hemopoietin receptor family most closely related to R γ c.

References:

1. Sims, J.E. *et al.* (2000) J. Exp. Med. **192**:671.
2. Park, L.S. *et al.* (2000) J. Exp. Med. **192**:659.
3. Pandey, A. *et al.* (2000) Nature Immunol. **1**:59.
4. Reche, P.A. *et al.* (2001) J. Immunol. **167**:336.