

# **Human TSLP Antibody**

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF1398

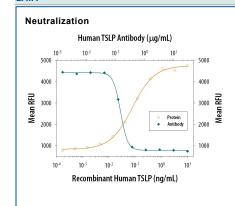
DESCRIPTION	
Species Reactivity	Human
Specificity	Detects human TSLP in ELISAs and Western blots. In sandwich immunoassays, less than 0.1% cross-reactivity with recombinant mouse TSLP and recombinant human TSLP R is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	E. coli-derived recombinant human TSLP Tyr29-Gln159 Accession # Q969D9
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. 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 Human TSLP (Catalog # 1398-TS)
Human TSLP Sandwich Immunoassay		Reagent
ELISA Capture	0.2-0.8 μg/mL	Human TSLP Antibody (Catalog # AF1398)
ELISA Detection	0.1-0.4 µg/mL	Human TSLP Biotinylated Antibody (Catalog # BAF1398)
Standard		Recombinant Human TSLP (Catalog # 1398-TS)
Neutralization	Measured by its ability to neutralize TSLP-induced proliferation in the BaF3 mouse pro-B cell line co-transfected with human IL-7 R $\alpha$ and TSLP R. The Neutralization Dose (ND $_{50}$ ) is typically 0.05-0.25 $\mu$ g/mL in the presence of 0.5 ng/mL Recombinant Human TSLP.	

#### DATA



Cell Proliferation Induced by TSLP and Neutralization by Human TSLP Antibody. Recombinant Human TSLP (Catalog # 1398-TS) stimulates proliferation in the BaF3 mouse pro-B cell line co-transfected with human IL-7 Rα and TSLP R in a dose-dependent manner (orange line). Proliferation elicited by Recombinant Human TSLP (0.5 ng/mL) is neutralized (green line) by increasing concentrations of Sheep Anti-Human TSLP Antigen Affinitypurified Polyclonal Antibody (Catalog # AF1398). The ND<sub>50</sub> is typically 0.05-0.25 µg/mL.

PREPARATION AND S	TURAGE
Peconstitution	Peronetitute at 0.2 mg/ml in sterile PRS

Reconstitution	reconstitute at 0.2 mg/mz in steme r bo.	
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.	

## Stability & Storage

## Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 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. Human TSLP cDNA encodes a 159 amino acid (aa) residue precursor protein with a 28 aa signal sequence. Within the mature region, six of the seven cysteine residues present in the mouse TSLP involved in intramolecular disulfide bond formation are conserved in the human TSLP. Human TSLP shares approximately 43% aa sequence identity with mouse TSLP. By Northern blot analysis, human TSLP expression has been detected in many tissues with the highest expressions in heart, liver, testis, and prostate. TSLP signals through a heterodimeric receptor complex that consists of IL-7 Rα and the TSLP R, a member of the hemopoietin receptor family most closely related to Rγ<sub>c</sub>.

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