

Product datasheet for TA306385

Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com

OriGene Technologies, Inc. 9620 Medical Center Drive, Ste 200

techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

TSLP Rabbit Polyclonal Antibody

Product data:

Product Type: Primary Antibodies

Applications: ELISA, IF, IHC, WB

Recommended Dilution: WB: 0.25 - 4 µg/mL

IHC-P: 1-2.5 μg/mL.

Antibody validated: Western Blot in human and mouse samples

Immunohistochemistry in human and mouse samples. All other applications and species not

yet tested.

Reactivity: Human, Mouse

Host: Rabbit Isotype: IgG

Clonality: Polyclonal

Immunogen: Anti-TSLP antibody (4023) was raised against a peptide corresponding to 19 amino acids near

the center of human TSLP.

The immunogen is located within the amino acids 40-90 of TSLP.

Formulation: TSLP Antibody is supplied in PBS containing 0.02% sodium azide.

Concentration: 1 mg/mL

Purification: TSLP Antibody is affinity chromatography purified via peptide column.

Conjugation: Unconjugated

Storage: TSLP antibody can be stored at 4°C up to one year. Antibodies should not be exposed to

prolonged high temperatures.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: Predicted: 18 kD

Observed: 17, 24 kD (Post-modifications: 2 N linked glycosylations)

Gene Name: thymic stromal lymphopoietin

Database Link: NP 149024

Entrez Gene 53603 MouseEntrez Gene 85480 Human

Q969D9





Background:

TSLP Antibody: Thymic stromal lymphopoietin (TSLP) has recently been identified as an important factor capable of driving dendritic cell maturation and activation. TSLP is a four-helix-bundle cytokine that is expressed mainly by barrier epithelial cells and is a potent activator of several cell types such as myeloid dendritic cells. TSLP is involved in the positive selection of regulatory T cells, maintenance of peripheral CD4+ T cell homeostasis and the induction of CD4+ T cell-mediated allergic reaction. TSLP is also capable of supporting the growth of fetal liver and adult B cell progenitors and their differentiation to the IgM-positive stage of B cell development. Amino acid sequence analysis has shown poor homology between human and mouse TSLP although they exhibit similar biological functions and are expressed in similar tissues. At least two differentially spliced isoforms of TSLP are known to exist.

Synonyms: thymic stromal lymphopoietin

Note: Optimal dilutions for each application to be determined by the researcher.

Protein Families: Druggable Genome

Protein Pathways: Cytokine-cytokine receptor interaction, Jak-STAT signaling pathway

Product images:

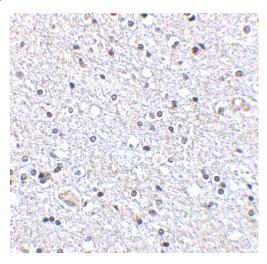


Figure 6 Immunohistochemistry Validation of TSLP in Human Brain Tissue

Immunohistochemical analysis of paraffinembedded Human Brain Tissue using anti-TSLP antibody (TA306385) at 2.5 μ g/ml. Tissue was fixed with formaldehyde and blocked with 10% serum for 1 h at RT; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody overnight at 4°C. A goat anti-rabbit IgG H&L (HRP) at 1/250 was used as secondary. Counter stained with Hematoxylin.



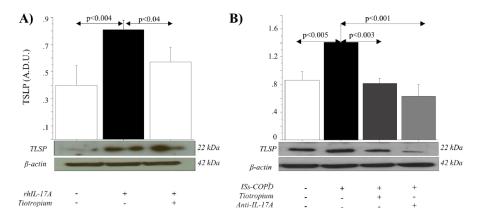


Figure 7 Regulated Expression Validation of TSLP in COPD Patients. (Anzalone et al., 2018) (A) shows NHBE cells, in the absence (Lane 2) or presence (Lane 3) of Tiotropium (100 nM), were stimulated with rhIL-17A (20 ng/ml) (n = 3). (B) shows NHBE cells, with ISs from COPD patients untreated (Lane 2 and Lane 3) or treated (Lane 4) with anti-IL-17A antibody (n = 3). (A) and (B) show TSLP expression decreases with the treatment of anti-cholinergic drugs.

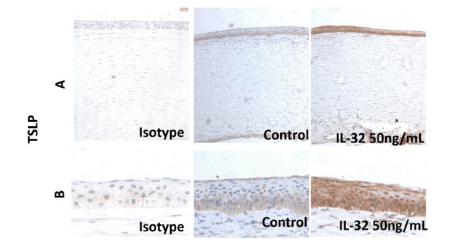


Figure 8 Induced Expression Validation of TSLP in Human Corneal Epithelium (Lin et al., 2018) Immunohistochemical images showing the TSLP protein detected by anti-TSLP antibodies in donor corneal tissues without (Control) or after exposure to IL-32 (50 ng/ml) ex vivo; an isotype IgG antibody was used as a negative control. The production of TSLP was increased after IL-32 treatment.

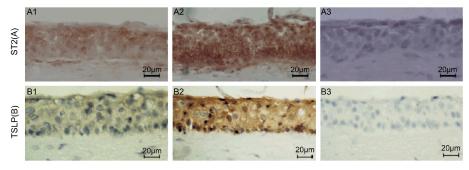
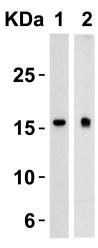
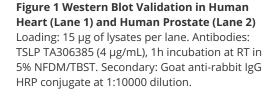
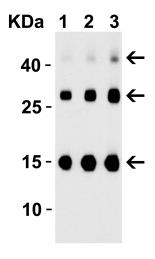


Figure 9 Induced Expression Validation of TSLP in Human Corneal Tissues (Lin et al., 2013) Immunohistochemical images showing TSLP protein detected by anti-TSLP antibodies in ex vivo donor human corneal tissues without (B1) or with exposure to IL-33 (10ng/mL) (B2). An isotype IgG antibody (B3) was used as a negative control. Magnificaiton 400X. The staining confirms the increased level of TSLP after IL-33 treatment.











Loading: 30ng of TSLP partial human recombinant protein per lane. Antibodies: TSLP TA306385 (Lane 1: 0.25 μ g/mL, Lane 2: 0.5 μ g/mL, Lane 3: 1 μ g/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit IgG HRP conjugate at 1:10000 dilution. TLSP partial human recombinant protein: 15kD, the observed bands at 30kD and 45kD are the dimer and trimer, respectively.

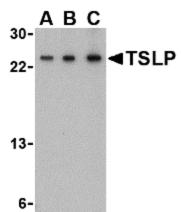


Figure 3 Western Blot Validation in Mouse A-20 Cell Line

Loading: 15 μ g of lysates per lane. Antibodies: TSLP TA306385 (A: 0.5 μ g/mL, B: 1 μ g/mL, C: 2 μ g/mL), 1h incubation at RT in 5% NFDM/TBST. Secondary: Goat anti-rabbit lgG HRP conjugate at 1:10000 dilution.