

DESCRIPTION

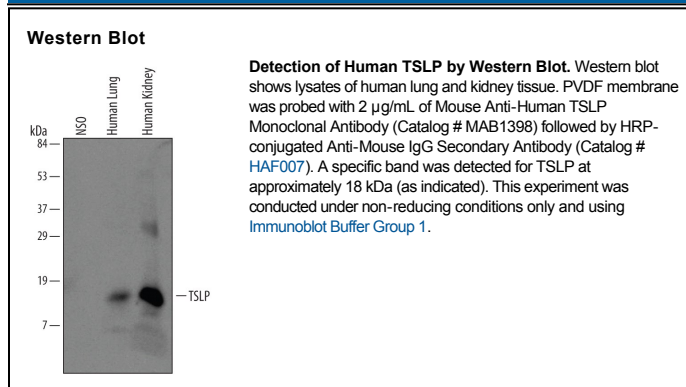
Species Reactivity	Human
Specificity	Detects human TSLP in direct ELISAs and Western blots. Does not cross-react with recombinant mouse (rm) IL-7 or rmTSLP.
Source	Monoclonal Mouse IgG _{2A} Clone # 258136
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human TSLP Tyr29-Gln159 Accession # Q969D9
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

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	2 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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 (1-3). 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 (4, 5). 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 R α and the TSLP R, a 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.
5. Quentmeier, H. *et al.* (2001) *Leukemia* **15**:1286.