

## **Product Data Sheet**

## **Purified anti-human TSLP**

Catalog # / Size: 512102 / 500 µg

Clone: 13H8.3

**Isotype:** Mouse IgG1,  $\kappa$ 

Reactivity: Human

**Preparation:** The antibody was purified by affinity chromatography.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C.

## **Applications:**

**Applications: ELISA** 

Recommended Usage: Each lot of this antibody is quality control tested by ELISA assay. For use as an ELISA detection antibody, a

concentration range of 0.5-2 µg/ml is recommended. To obtain a linear standard curve, serial dilutions of TSLP recombinant protein ranging from 200 to 3.1 ng/ml are recommended for each ELISA plate. It is recommended that

the reagent be titrated for optimal performance for each application.

Description: Thymic Stromal Lymphopoietin (TSLP) is a hemopoietic protein that is expressed in the heart, liver and prostate.

TSLP overlaps biological activities with IL-7 and binds with the heterodimeric receptor complex consisting of the IL-7R alpha chain (IL-7Rα) and the TSLP-specific chain (TSLPR). Like IL-7, TSLP induces phosphorylation of STAT3 and STAT5, but uses kinases other than the JAKs for activation. TSLP prohibited apoptosis and stimulated growth of the human acute myeloid leukemia (AML)-derived cell line MUTZ3. It induces the release of T cell-attracting chemokines TARC and MDC from monocytes and activates CD11c(+) dendritic cells (DCs). TSLP activated DCs primed naïve T cells to produce the proallergic cytokines (IL-4, IL-5, IL-13, TNFα) while down-regulating IL-10 and IFN-γ suggesting a role in initiating allergic inflammation. Recent studies revealed that expression of TSLP has a direct link to the pathogenesis of allergic inflammation such as atopic dermatitis and asthma via activating dendritic cells and mast

cells which trigger inflammatory Th2 response characterized by high TNF-alpha and little IL-10 production.

- Antigen References: 1. Liu YJ. 2007. J Allergy Clin Immunol. 120:238. Nagata Y. 2007 Int Arch Allergy Immunol. 144:305. 2. Jiang Q, et al. 2007 BMC Immunol. 8:11. 3. Kato A. et al. 2007. J Immunol. 179:1080.

  - 4. Rochman I, et al. 2007 J Immunol. 178(11):6720.

  - 5. Reche PA, et al. 2001. J Immunol. 167:336. 6. Pandey A, et al. 2000. Nature Immunol. 1:59.
  - 7. Park LS, et al. 2000. J Exp. Med. 192:659.

**Related Products: Product** Clone Application

Cell Staining Buffer

FC, ICC, ICFC FC, ICC, ICFC, IF, IHC, IP, WB Purified Mouse IgG1, κ Isotype Ctrl MG1-45



