Human TSLPR Antibody

Monoclonal Mouse IgG_{2B} Clone # 179134

Catalog Number: MAB9811

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human TSLP R in direct ELISAs.
Source	Monoclonal Mouse IgG_{2B} Clone # 179134
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human TSLP R Gly25-Lys231 Accession # Q9HC73
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 either lyophilized or as a 0.2 μm filtered solution in PBS.

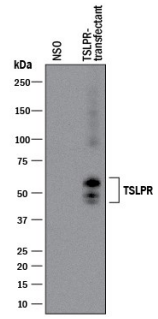
APPLICATIONS

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	0.5 µg/mL	See Below
Flow Cytometry	0.25 µg/10^6 cells	NS0 cells transfected with hTSLPR vs Irrelevant NS0 transfectant cells

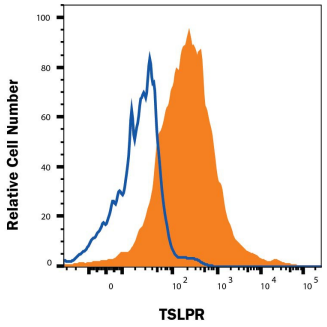
DATA

Western Blot



Detection of Human TSLP R by Western Blot. Western blot shows lysates of NS0 mouse myeloma cell line mock transfected or transfected with human TSLP R. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human TSLP R Monoclonal Antibody (Catalog # MAB9811) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF018). Specific bands were detected for TSLP R at approximately 45-60 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Flow Cytometry



Detection of TSLPR in NS0 cells transfected with hTSLPR vs Irrelevant NS0 transfectant cells by Flow Cytometry. NS0 cells transfected with hTSLPR (filled histogram) vs Irrelevant NS0 transfectant cells (open histogram) were stained with Mouse Anti-Human TSLPR Monoclonal Antibody (Catalog # MAB9811) followed by Phycoerythrin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B). View our protocol for Staining Membrane-associated Proteins.

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.** • 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.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 Canada TEL 855 668 8722 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449

Human TSLPR Antibody

Monoclonal Mouse IgG_{2B} Clone # 179134

Catalog Number: MAB9811

BACKGROUND

TSLP R, also named Delta (1) and CRLM-2 (2) (cytokine receptor-like module-2), was originally cloned as a novel type 1 cytokine receptor with similarity to the common gamma chain. It was subsequently identified to be a subunit of the cellular receptor for the IL-7-like cytokine TSLP and termed TSLP R (3). The human TSLP R cDNA encodes a 371 amino acid (aa) residue type 1 membrane protein with a 22 aa residue signal peptide, a 210 aa residue extracellular domain, a 20 aa residue transmembrane domain, and a 119 aa residue cytoplasmic domain (4, 5). The extracellular region contains two fibronectin type III-like domains and a WSXWS-like motif. The cytoplasmic domain contains a membrane-proximal box 1 motif that is known to be important for association with JAKs (4). Human TSLP R displays 39% identity to mouse TSLP R and 24% identity to the common gamma receptor (4). An alternatively spliced mRNA variant encoding a soluble TSLP R has also been reported in mouse (2). TSLP R expression is ubiquitous in the immune and hematopoietic cells, but is up-regulated in Th2-skewed cells. Cells expressing TSLP R alone bind TSLP with low affinity. Co-expression of TSLP R and IL-7 Rα is required for high-affinity TSLP binding and signal transduction (3-6). The TSLP R and IL-7 Rα are co-expressed primarily on monocytes and dendritic cells and at lower levels in lymphoid cells. TSLP has been shown to induce the release of T cell-attracting chemokines from monocytes and enhance the maturation of $CD11c^+$ dendritic cells (5).

References:

1. Fujio, K. *et al.* (2000) Blood **95**:2204.
2. Hiroyama, T. *et al.* (2000) Biochem. Biophys. Res. Commun. **272**:224.
3. Park, L.S. *et al.* (2000) J. Exp. Med. **192**:659.
4. Tonozuka, Y. *et al.* (2001) Cytogenet. Cell Genet. **93**:23.
5. Reche, P.A. *et al.* (2001) J. Immunol. **167**:336.
6. Pandey, A. *et al.* (2000) Nat. Immunol. **1**:59.

bio-techne®
Global bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL +1 612 379 2956
USA TEL 800 343 7475 **Canada** TEL 855 668 8722 **China** TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449