Human TSLPR Alexa Fluor® 750-conjugated Antibody

Monoclonal Mouse IgG_{2B} Clone # 179134

Catalog Number: FAB9811S

100 µg

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
Conjugate	Alexa Fluor 750 Excitation Wavelength: 749 nm Emission Wavelength: 775 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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.*

Flow Cytometry	Titration recommended for optimal concentration with starting range of 0.1-1 µg/1 million cells. Sample used for this experiment was NS0/hTSLPR cells.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Protect from light. Do not freeze.** • 12 months from date of receipt, 2 to 8 °C as supplied.

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.

PRODUCT SPECIFIC NOTICES

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