

Anti-Mouse TSLP Functional Grade Purified

Catalog Number: 16-5491

Also known as: thymic stromal derived lymphopoietin RUO: For Research Use Only. Not for use in diagnostic procedures.



Product Information

Contents: Anti-Mouse TSLP Functional Grade Purified **REF** Catalog Number: 16-5491

Clone: eBio28F12 (28F12) **Concentration:** 1 mg/mL Host/Isotype: Rat IgG2a, kappa Handling Conditions: Use in sterile environment. Endotoxin: Less than 0.001 ng/ug antibody, as determined by the LAL assay.

Formulation: aqueous buffer, no sodium azide Temperature Limitation: Store at 2-8°C.

Batch Code: Refer to vial

LOT

Use By: Refer to vial

Description

The monoclonal antibody eBio28F12 reacts with and inhibits the bioactivity of mouse TSLP. Thymic Stromal-Derived Lymphopoetin (TSLP) was first identified in the tissue culture supernatant of a thymic stromal cell line as a growth factor capable of inducing proliferation and differentiation of pre-B cells. It was later found to be closely related to another stromal cytokine, IL-7, with which it shares overlapping functions. Along with its proliferative effects on B cells, TSLP induces dendritic cells to support the differentiation of naïve T cells towards the Th2 lineage and may also be involved in the development of CD4⁺CD25⁺ regulatory T cells. The receptor for TSLP is heterodimeric and shares one subunit, IL-7R α , with IL-7 and other members of the family, while the TSLPR subunit is unique to TSLP.

TSLP expression can be induced by a variety of inflammatory cytokines and TLR ligands. Expression is regulated by NF-KB and has been detected in epithelial cells, stromal cells, and basophils. Elevated levels of TSLP are associated with asthma and atopic dermatitis, which are both Th2-mediated inflammatory conditions. It is believed that chronic overexpression of TSLP may result in increased sensitivity to allergens, resulting in susceptibility to these conditions.

Applications Reported

The monoclonal antibody eBio28F12 reacts with and inhibits the bioactivity of mouse TSLP.

Applications Tested

The ND₅₀ of eBio28F12, as determined by the neutralization of recombinant mouse TSLP-induced proliferation of the Nag8/7 cell line, is 1-3 ng/ml in the presence of 0.5 ng/ml mTSLP. The neutralization dose of this antibody will vary depending on cell type, assay method, and cytokine concentration.



Anti-Mouse TSLP Functional Grade Purified

Catalog Number: 16-5491 Also known as: thymic stromal derived lymphopoietin RUO: For Research Use Only. Not for use in diagnostic procedures.

References

Demehri S, Morimoto M, Holtzman M, Kopan R. Skin-derived TSLP triggers progression from epidermal-barrier defects to asthma. PLoS Biol. 2009 May 19:7(5):e1000067

Taylor B, Zaph C, Troy A, Du Y, Guild K, Comeau M, Artis D. TSLP regulates intestinal immunity and inflammation in mouse models of helminth infection and colitis. J Exp Med. 2009 Mar 16;206(3):655-67

Zhou B, Headley MB, Aye T, Tocker J, Comeau MR, Ziegler SF. Reversal of thymic stromal lyphopoetin-induced airway inflammation through inhibition of Th2 responses. J Immunol. 2008 Nov 1;181(9):6557-62

Related Products

14-8498 Mouse TSLP Recombinant Protein 16-4321 Rat IgG2a K Isotype Control Functional Grade Purified (eBR2a) 34-8498 Mouse TSLP Recombinant Protein Carrier-Free 88-7490 Mouse TSLP ELISA Ready-SET-Go!®