# bio-techne® RD SYSTEMS

# Mouse TSLP Antibody

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF555

## DESCRIPTION

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Species Reactivity	Mouse	
Specificity	Detects mouse TSLP in direct ELISAs and Western blots.	
Source	Polyclonal Goat IgG	
Purification	Antigen Affinity-purified	
Immunogen	<i>S. frugiperda</i> insect ovarian cell line <i>Sf</i> 21-derived recombinant mouse TSLP Tyr20-Glu140 Accession # Q9JIE6	
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.	
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.	

## 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	0.1 µg/mL	Recombinant Mouse TSLP (Catalog # 555-TS)
Neutralization	Measured by its ability to neutralize TSLP-induced proliferation in the BaF3 mouse pro-B cell line transfected with mouse IL-7 Rα/CD127 [Park, L.S. <i>et al.</i> (2000) J. Exp. Med. <b>192</b> :659]. The Neutralization Dose (ND <sub>50</sub> ) is typically ≤0.4 μg/mL in the presence of 7.5 ng/mL Recombinant Mouse TSLP.	

# DATA



Cell Proliferation Induced by TSLP and Neutralization by Mouse TSLP Antibody. Recombinant Mouse TSLP (Catalog # 555-TS) stimulates proliferation in the BaF3 mouse pro-B cell line transfected with mouse IL-7 Ra/CD127 in a dosedependent manner (orange line). Proliferation elicited by Recombinant Mouse TSLP (7.5 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Mouse TSLP Antigen Affinity-purified Polyclonal Antibody (Catalog # AF555). The ND<sub>50</sub> is typically ≤0.4 µg/mL.

# PREPARATION AND STORAGE

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Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.	
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.	
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.	
	<ul> <li>12 months from date of receipt, -20 to -70 °C as supplied.</li> </ul>	
	<ul> <li>1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> </ul>	
	<ul> <li>6 months20 to -70 °C under sterile conditions after reconstitution.</li> </ul>	

## BACKGROUND

Stromal Lymphopoietin (TSLP) was originally identified from the conditioned medium of a mouse thymic stromal cell line as a protein that promoted the development of B cells. The activity of mouse TSLP overlaps with, but is distinct from, that of mouse IL-7 (1). Mouse TSLP cDNA encodes a 140 amino acid (aa) residue precursor protein with a 19 as signal sequence. Within the mature region, there are three potential N-glycosylation sites. The *Sf* 21 cell expressed rmTSLP is likely to be glycosylated at all three sites, as three major glycoforms were visible on SDS-PAGE (Figure 1). Insect cells are known to express relatively simple and homogeneous N-glycans that mainly belong to the high mannose type (2). This recombinant protein was found to be an excellent substrate for N-specific glycosidases such as Endo F3 (Figure 1). The majority of the glycans on rmTSLP can be readily removed by Endo F3. However, a small percentage of the glycans is somewhat resistant to Endo F3 digestion, possibly lacking core fucose, as it is known that core fucosylated N-glycans are strongly preferred substrates for Endo F3 digestion (3).

## References:

- 1. Sims, J.E. *et al.* (2000) J. Exp. Med. **192**:671.
- 2. Staudacher, E. et al. (1992) Eur. J. Biochem. 207:987.
- 3. Tarentino, A.L. and T.H. Jr. Plummer (1994) Glycobiology 4: 771.

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