

# Validation data for recombinant human TSLP

<https://www.invivogen.com/cytokines-human-tslp-recombinant-protein>

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Thymic stromal lymphopoietin (TSLP) is an interleukin-7 (IL-7)-like cytokine with multiple functions, including cell proliferation and survival. Its size and purity was assessed using SDS-PAGE (Figure 1). The biological activity of TSLP is confirmed using HEK-Blue™ TSLP cells featuring a STAT5-inducible SEAP reporter (Figure 2). Recombinant human TSLP can be used together with HEK-Blue™ TSLP cells for the screening of inhibitory molecules, such as Tezepelumab, a monoclonal antibody targeting TSLP (Figure 3).

Human TSLP SDS-PAGE analysis

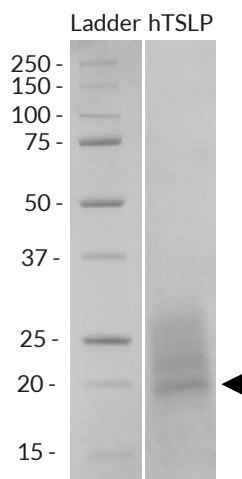


Figure 1. SDS-PAGE analysis of recombinant human (h)TSLP. 1.5 µg of hTSLP was loaded on a 12% Mini-PROTEAN® TGX Stain-Free™ Precast Gel (Bio-Rad). Detection was performed as per the manufacturer's instructions. A band was detected at ~20 kDa.

Cellular response to human TSLP

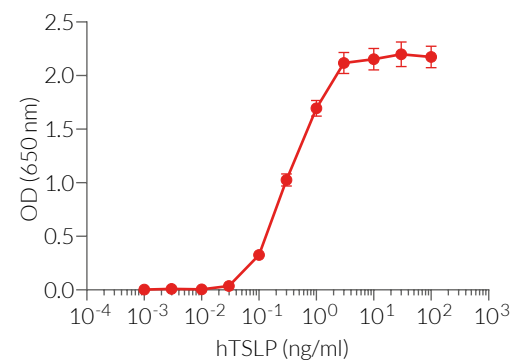


Figure 2. Dose-response of HEK-Blue™ TSLP cells to recombinant human TSLP. HEK-Blue™ TSLP cells (cat. code: [hkb-tslp](#)) were stimulated with increasing concentrations of recombinant human TSLP. After overnight incubation, the STAT5-induced SEAP activity was determined using QUANTI-Blue™, a SEAP detection reagent. Data are shown as optical density (OD) at 650 nm (mean ± SEM).

Neutralization of hTSLP signaling using Tezepelumab

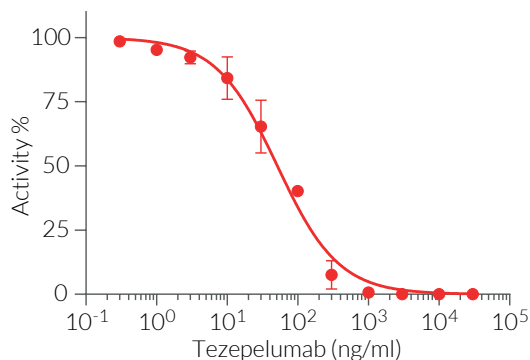


Figure 3. Dose-dependent inhibition of HEK-Blue™ TSLP cell response using Tezepelumab biosimilar. Increasing concentrations of Anti-hTSLP-hIgG2 (cat. code: [htslp-mab2](#)) (0.3 ng/ml - 30 µg/ml) were incubated with recombinant human TSLP (1 ng/ml) for 1 h before the addition of HEK-Blue™ TSLP cells. After overnight incubation, SEAP activity in the cell culture supernatant was assessed using QUANTI-Blue™ Solution. Data are shown in percentage of activity (mean ± SEM).

## TECHNICAL SUPPORT

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