

Validation data for recombinant human TL1A

<https://www.invivogen.com/cytokines-human-tl1a-recombinant-protein>

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Tumor necrosis factor (TNF)-like 1A (TL1A), also called TNFSF15, is a cytokine from the TNF superfamily that drives the production of pro-inflammatory cytokines and differentiation of T helper subsets. Its size and purity was assessed using SDS-PAGE (Figure 1). The biological activity of TL1A is confirmed using HEK-Blue™ TL1A cells featuring an NF-κB/AP1-inducible SEAP reporter (Figure 2). Recombinant human TL1A can be used together with HEK-Blue™ TL1A cells for the screening of inhibitory molecules, such as Tulisokibart, a monoclonal antibody targeting TL1A (Figure 3).

Human TL1A SDS-PAGE analysis

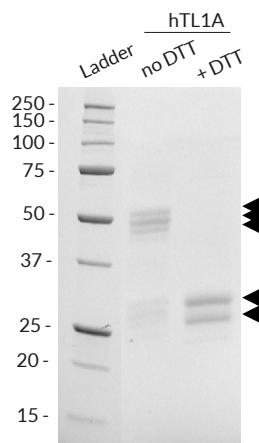


Figure 1. SDS-PAGE analysis of recombinant human (h)TL1A. 1.5 µg of hTL1A, treated or not with dithiothreitol (DTT) reducing agent, was loaded on a 12% Mini-PROTEAN® TGX Stain-Free™ Precast Gel (Bio-Rad). Detection was performed as per the manufacturer's instructions. In absence of DTT, multimeric bands were detected at ~50 kDa. In presence of DTT, monomeric bands were detected at ~28 kDa. Note: As hTL1A is produced in mammalian cells, it displays heterogeneous glycosylation, thus impacting its size (arrows).

Cellular response to human TL1A

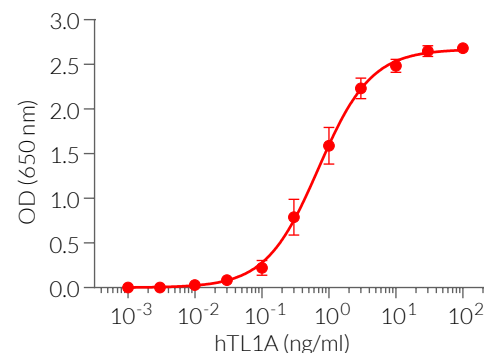


Figure 2. Dose-response of HEK-Blue™ TL1A cells to recombinant human TL1A. HEK-Blue™ TL1A cells (cat. code: hkb-htl1a) were stimulated with increasing concentrations of recombinant human TL1A. After overnight incubation, the NF-κB/AP1-induced SEAP activity was determined using QUANTI-Blue™, a SEAP detection reagent. Data are shown as optical density (OD) at 650 nm (mean ± SEM).

Neutralization of hTL1A signaling using Tulisokibart

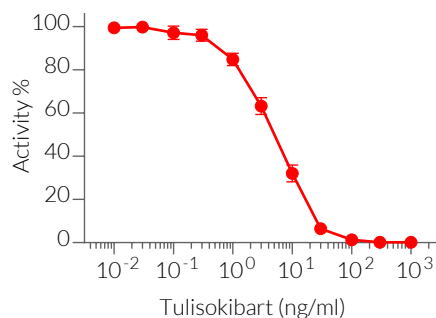


Figure 3. Dose-dependent inhibition of HEK-Blue™ TL1A cell response using Tulisokibart biosimilar. Increasing concentrations of Anti-hTL1A-hIgG1 (cat. code: htl1a-mab1) (0.01 ng/ml - 1 µg/ml) were incubated with recombinant human TL1A (10 ng/ml) for 1 h before the addition of HEK-Blue™ TL1A cells. After 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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