abcam

Product datasheet

Human TSLP ELISA Kit ab192149

SimpleStep ELISA

1 References 5 Images

Overview

Product name Human TSLP ELISA Kit

Detection methodColorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%	
Overall	8			4.4%	

Inter-assay

Sample	n	Mean	SD	CV%	
Overall	3			5%	

Sample type Cell culture supernatant, Serum

Assay type Sandwich (quantitative)

Sensitivity 3 pg/ml

Range 15.6 pg/ml - 1000 pg/ml

Recovery Sample specific recovery

Sample type	Average %	Range
Serum	88	83% - 93%
Cell culture media	121	114% - 126%

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Human

Product overview Human TSLP ELISA Kit (ab192149) is a single-wash 90 min sandwich ELISA designed for the

quantitative measurement of TSLP protein in cell culture supernatant and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human TSLP with 3 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Notes

Thymic stromal lyphopoietin (TSLP) is a protein belonging to the IL-7 cytokine family. TSLP is released by epithelial cells and keratinocytes in response to trauma, infection or allergen. It acts upon dendritic cells to mediate TH2 mediated immune response and appears to be a key mediator in many inflammatory diseases such as: Asthma, Eczema, and Atopic Dermatitis. TSLP also acts upon mast cells promote the release of IL-5, -6, and -13 in the presence of IL-1 and TNF- α .

Platform

Microplate

Properties

Storage instructions

Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human TSLP Capture Antibody	1 x 600µl
10X Human TSLP Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BI	1 x 6ml
Human TSLP Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent 50BS	1 x 20ml
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

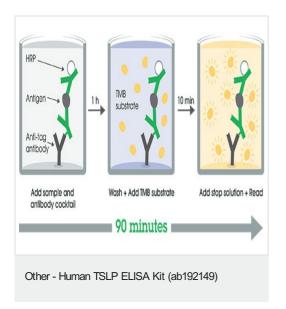
Relevance

The TSLP gene encodes a hemopoietic cytokine proposed to signal through a heterodimeric receptor complex composed of the thymic stromal lymphopoietin receptor and the IL-7R alpha chain. This mainly impacts myeloid cells and induces the release of T cell-attracting chemokines from monocytes and enhances the maturation of CD11c(+) dendritic cells. The protein promotes T helper type 2 (TH2) cell responses that are associated with immunity in various inflammatory diseases, including asthma, chronic obstructive pulmonary disease and allergic inflammation. The protein is therefore considered a potential therapeutic target for the treatment of these diseases. Alternative splicing of this gene results in multiple transcript variants.

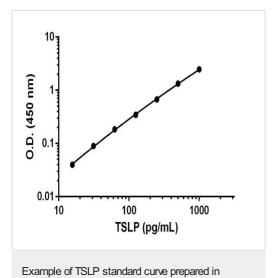
Cellular localization

Secreted

Images

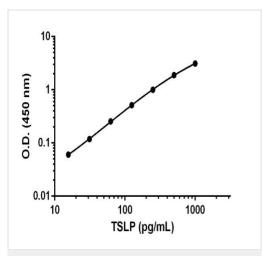


SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

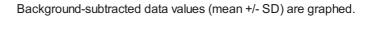


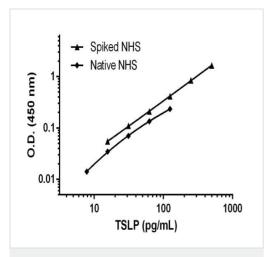
Sample Diluent 50BS.

Background-subtracted data values (mean +/- SD) are graphed.



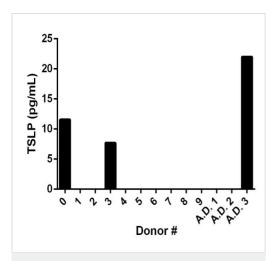
Example of TSLP standard curve prepared in Sample Diluent NS.





Titration of normal Human serum (NHS) native and spiked with 0.5 ng/mL recombinant TSLP protein to within the working range of the assay.

The samples and standard curve was diluted in Sample Diluent 50BS. Background-subtracted data values (mean +/- SD, n = 2) are graphed.



Severity of A.D. symptoms and medical histories of all donors are unknown. Samples and standard curve was diluted in Sample Diluent 50BS. Background-subtracted data values (mean +/- SD, n = 2) are graphed.

Assay for TSLP levels from 10 Individual Donor Human Serum samples and patients clinically diagnosed with Atopic Dermatitis (A.D.) to within the working range of the assay.

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