abcam

Product datasheet

Human TSC-1 ELISA Kit ab223594

Recombinant SimpleStep ELISA

5 Images

Overview

Product name Human TSC-1 ELISA Kit

Detection method Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
Supernatant	8			4.8%

Inter-assay

Sample	n	Mean	SD	CV%
Supernatant	3			8.7%

Sample type Cell culture supernatant, Serum, EDTA Plasma, Cit plasma

Assay type Sandwich (quantitative)

Sensitivity 1.54 pg/ml

4.69 pg/ml - 300 pg/ml Range

Recovery Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	101	95% - 108%
Serum	102	90% - 118%
EDTA Plasma	101	85% - 109%
Cit plasma	102	83% - 117%

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Human

Product overview

Human TSC-1 ELISA Kit (ab223594) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of TSC-1 protein in cell culture supernatant, cit plasma, edta plasma, and serum. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human TSC-1 with 1.54 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

TSC-1 (Eotaxin 3 / CCL26) is a small cytokine within the CC chemokine family coded by a gene located on human chromosome 7. TSC-1 is also know by Macrophage inflammatory protein 4-alpha, Thymic stroma chemokine-1 and IMAC. It has known expression in heart, lung and ovarian tissue. TSC-1 expression can be induced by IL-4 stimulation which then can activate chemotaxic activity of eosinophils and basophiles by binding to the cell surface chemokine receptor CCR3.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions

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

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

Components	1 x 96 tests
TMB Development Solution	1 x 12ml

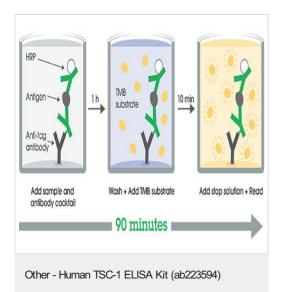
Function Chemotactic for eosinophils and basophils. Binds to CCR3.

Tissue specificityUbiquitously expressed at low levels in various tissues including heart and ovary.

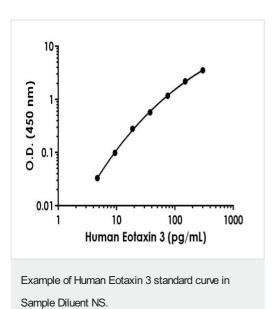
Sequence similarities Belongs to the intercrine beta (chemokine CC) family.

Cellular localization Secreted.

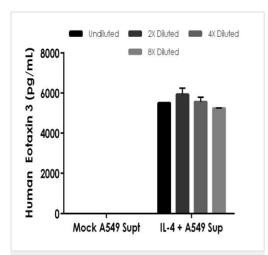
Images



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.

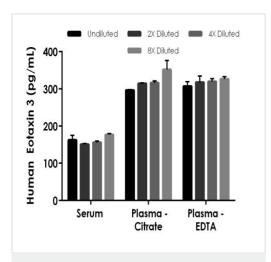


Background-subtracted data values (mean +/- SD) are graphed.



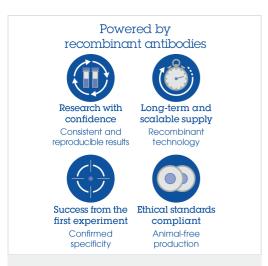
Interpolated concentrations of native Eotaxin 3 in human A549 cell culture supernatant samples.

The concentrations of Eotaxin 3 were measured in duplicates, interpolated from the Eotaxin 3 standard curves and corrected for sample dilution. Undiluted human A549 supernatant: 20%. The interpolated dilution factor corrected values are plotted (mean +/-SD, n=2). The mean Eotaxin 3 concentration was determined to be 5559.17 pg/mL.



Interpolated concentrations of spiked Eotaxin 3 in serum and plasma.

Interpolated concentrations of spiked Eotaxin 3 in human serum 50%, plasma (citrate) 50% and plasma (EDTA) 50%. The concentrations of Eotaxin 3 were measured in duplicate and interpolated from the Eotaxin 3 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Eotaxin 3 concentration was determined to be 161 pg/mL in human serum and 320.02 pg/mL in citrate plasma, 318.05 pg/ml in EDTA plasma.



Sandwich ELISA - Human TSC-1 ELISA Kit

(ab223594)

To learn more about the advantages of recombinant antibodies see **here**.

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