# abcam

## Product datasheet

# Human TARC ELISA Kit (CCL17) ab183366

SimpleStep ELISA

1 References 5 Images

Overview

Product name Human TARC ELISA Kit (CCL17)

**Detection method** Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
Supernatant	5			4.4%

Inter-assay

Sample	n	Mean	SD	CV%
Supernatant	3			3.3%

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

Assay type Sandwich (quantitative)

Sensitivity 78.5 pg/ml

**Range** 176 pg/ml - 2000 pg/ml

Recovery Sample specific recovery

Sample type	Average %	Range
Serum	= 112	98% - 126%
Cell culture media	= 93	91% - 95%
Hep Plasma	= 123	117% - 130%
EDTA Plasma	= 108	104% - 111%
Cit plasma	= 97	97% - 98%

Assay time 1h 30m

**Assay duration** One step assay

1

#### Species reactivity

#### **Product overview**

Reacts with: Human

Human TARC ELISA Kit (CCL17) (ab183366) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of TARC protein in human cell culture supernatants, serum and plasma samples. It uses our proprietary SimpleStep ELISA® technology. Quantitate human TARC with 78.5 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 SimpeStep ELISA® kits.

TARC is a member of the CC chemokine group that is constitutively expressed in the thymus and is transiently produced by a variety of cell types: dendritic cells (DC), endothelial cells, keratinocytes (KC), bronchial epithelial cells and fibroblasts. TARC is a ligand for chemokine receptor CCR4, expressed on Th2 lymphocytes, basophils and natural killer cells. CCL17 binds to CCR4 to induce chemotaxis in T cells.

TARC production appears to be upregulated by TNF- $\alpha$  and IFN- $\gamma$  synergistically through NFkB and p38 signaling pathways in Human kertinocytes. Cytokines IL-4 and TGF- $\beta$ 1 act to downregulate TNF- $\alpha$  and IFN- $\gamma$  induced TARC production in Human keratinocytes. TARC (CCL17) and its receptor CCR4 are believed to play important roles in the pathogenesis of the skin diseases Atopic Dermatitis (AD), Bullous pemphigoid (BP) and Mycosis fungoides (MF).

#### **Platform**

Microplate

#### **Properties**

#### Storage instructions

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

Components	1 x 96 tests	1 x 96 tests
10X Human TARC Capture Antibody	1 x 600µl	1 x 600µl
10X Human TARC Detector Antibody	1 x 600µl	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml	1 x 20ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml	1 x 6ml
Plate Seals	1 unit	1 unit
Sample Diluent 50BP	1 x 20ml	1 x 20ml

Components	1 x 96 tests	1 x 96 tests
Sample Diluent NS (ab193972)	1 x 50ml	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 unit
Stop Solution	1 x 12ml	1 x 12ml
TARC Human Lyophilized Recombinant Protein	2 vials	2 vials
TMB Development Solution	1 x 12ml	1 x 12ml

**Function** Chemotactic factor for T-lymphocytes but not monocytes or granulocytes. May play a role in T-cell

development in thymus and in trafficking and activation of mature T-cells. Binds to CCR4.

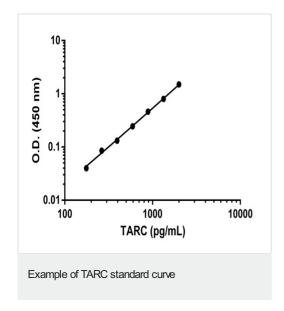
Tissue specificity Expressed at high levels in thymus and at low levels in the lung, colon and small intestine.

Belongs to the intercrine beta (chemokine CC) family.

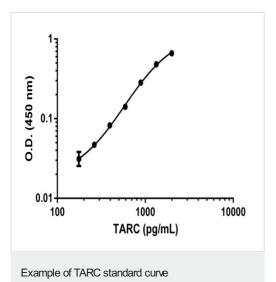
Sequence similarities

**Cellular localization** Secreted.

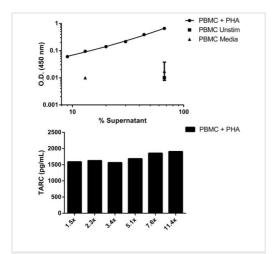
### **Images**



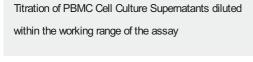
The TARC standard curve was prepared using Sample Diluent. Background-subtracted data values (mean +/- SD) are graphed.

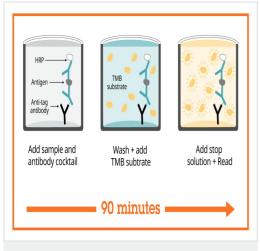


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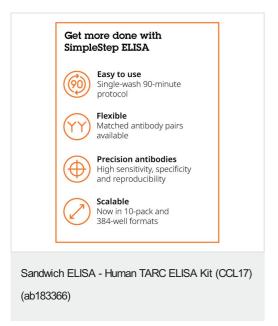
Background subtracted data from duplicate measurements are plotted. Bar graph denotes quantification of TARC interpolated from standard curve and multiplied by dilution factor.





Sandwich ELISA - Human TARC ELISA Kit (CCL17) (ab183366)

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.



To learn more about the advantages of SimpleStep ELISA® kits see <u>here</u>.

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