

Human CD4 ELISA Kit ab234569

Recombinant SimpleStep ELISA®

5 Images

Overview

Product name	Human CD4 ELISA Kit				
Detection method	Colorimetric				
Precision	Intra-assay				
	Sample	n	Mean	SD	CV%
	Cell extract	3			1.2%
	Inter-assay				
	Sample	n	Mean	SD	CV%
	Cell extract	8			6.4%
Sample type	Cell culture extracts				
Assay type	Sandwich (quantitative)				
Sensitivity	13.7 pg/ml				
Range	0.469 ng/ml - 30 ng/ml				
Recovery	Sample specific recovery				
	Sample type	Average %		Range	
	Cell culture extracts	100		96% - 105%	
Assay time	1h 30m				
Assay duration	One step assay				
Species reactivity	Reacts with: Human				
Product overview	Human CD4 ELISA Kit (ab234569) is a single-wash 90 min sandwich ELISA designed for the				

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 (**ab203359**) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

**Notes** Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

**Platform** Pre-coated microplate (12 x 8 well strips)

## Properties

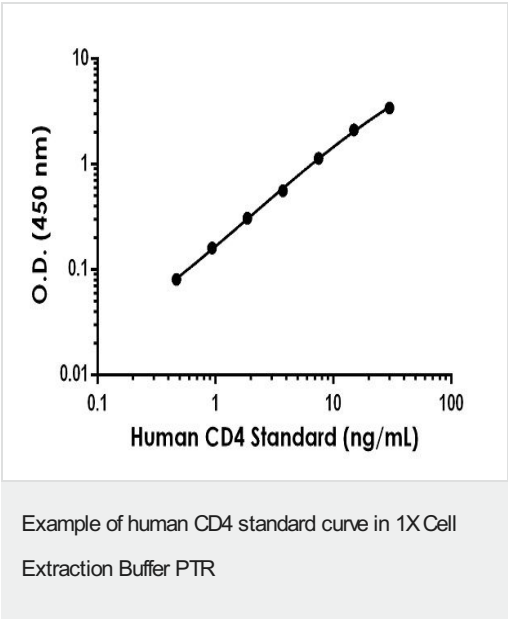
**Storage instructions** Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human CD4 Capture Antibody	1 x 600µl
10X Human CD4 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 4BI	1 x 6ml
Human CD4 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

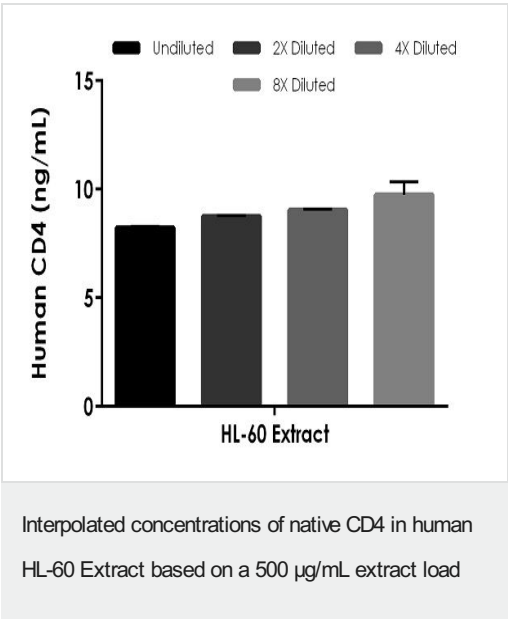
**Function** Accessory protein for MHC class-II antigen/T-cell receptor interaction. May regulate T-cell activation. Induces the aggregation of lipid rafts.

<b>Sequence similarities</b>	<p>Contains 3 Ig-like C2-type (immunoglobulin-like) domains.</p> <p>Contains 1 Ig-like V-type (immunoglobulin-like) domain.</p>
<b>Post-translational modifications</b>	<p>Palmitoylation and association with LCK contribute to the enrichment of CD4 in lipid rafts.</p>
<b>Cellular localization</b>	<p>Cell membrane. Localizes to lipid rafts. Removed from plasma membrane by HIV-1 Nef protein that increases clathrin-dependent endocytosis of this antigen to target it to lysosomal degradation.</p> <p>Cell surface expression is also down-modulated by HIV-1 Envelope polypeptide gp160 that interacts with, and sequesters CD4 in the endoplasmic reticulum.</p>

Images



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



The concentrations of CD4 were measured in duplicate and interpolated from the CD4 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean CD4 concentration was determined to be 8.95 ng/mL in HL-60 extract.

Powered by  
recombinant antibodies



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



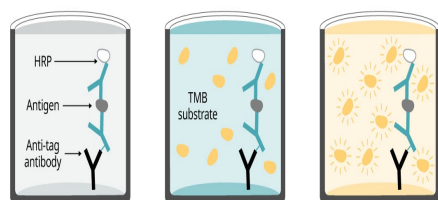
**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Sandwich ELISA - Human CD4 ELISA Kit  
(ab234569)

To learn more about the advantages of recombinant antibodies see [here](#).



Add sample and  
antibody cocktail

Wash + add  
TMB substrate

Add stop  
solution + Read

**90 minutes**

Sandwich ELISA - Human CD4 ELISA Kit  
(ab234569)

SimpleStep ELISA technology allows the formation of the antibody-antigen 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.

**Get more done with  
SimpleStep ELISA**



**Easy to use**  
Single-wash 90-minute  
protocol



**Flexible**  
Matched antibody pairs  
available



**Precision antibodies**  
High sensitivity, specificity  
and reproducibility



**Scalable**  
Now in 10-pack and  
384-well formats

Sandwich ELISA - Human CD4 ELISA Kit  
(ab234569)

To learn more about the advantages of SimpleStep ELISA® kits  
see [here](#).

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

### Our Abpromise to you: Quality guaranteed and expert technical support

---

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

### Terms and conditions

---

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors