abcam

Product datasheet

Human S100A4 ELISA Kit ab283547

Recombinant SimpleStep ELISA

5 Images

Overview

Product name Human S100A4 ELISA Kit

Detection method Colorimetric

Precision

Inter-assay

Sample	n	Mean	SD	CV%
supernatant	3			6.8%

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

Assay type Sandwich (quantitative)

Sensitivity 0.41 ng/ml

Range 0.94 ng/ml - 60 ng/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture supernatant	94	92% - 95%
Serum	99	90% - 108%
EDTA Plasma	87	83% - 94%
Cit plasma	86	85% - 88%

Assay time 1h 30m

Assay duration One step assay

Species reactivity **Reacts with:** Human

Product overview Human S100A4 ELISA kit (ab283547) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Human S100A4 protein in human serum, pasma and cell culture supernatant. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human S100A4 with 0.41 ng/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 (**ab203359**) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Notes

S100A4, encoded by the *S100A4* gene, is a member of the S100 calcium binding family of proteins. S100A4 is known to be highly associated with components of the cytoskeleton to regulate the motility that can serve as a metastasis factor and invasiveness of cancer cells. When the gene is upregulated, it subsequently changes the cell's morphology, making it more susceptible to invasion from other proteins that contribute to metastasis.

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 S100A4 Capture Antibody	1 x 600µl
10X Human S100A4 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml
Human S100A4 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent 25BS	1 x 20ml
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

Tissue specificity

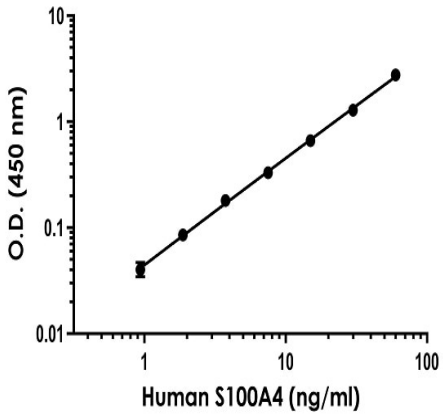
Ubiquitously expressed.

Sequence similarities	Belongs to the S-100 family. Contains 2 EF-hand domains.

Images

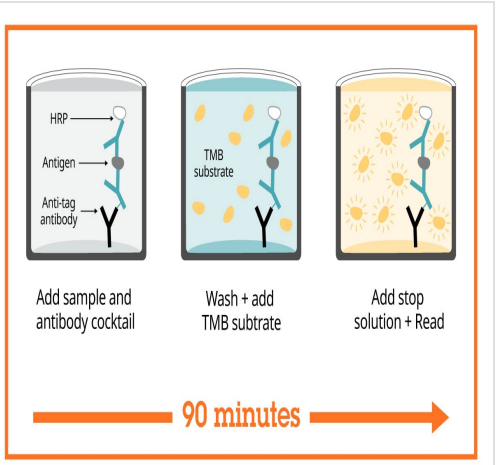
Recombinant Antibody Benefits

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



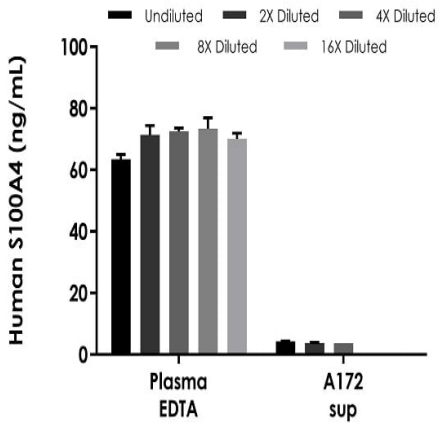
Example of human S100A4 standard curve in Sample Diluent 25BS.

The S100A4 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



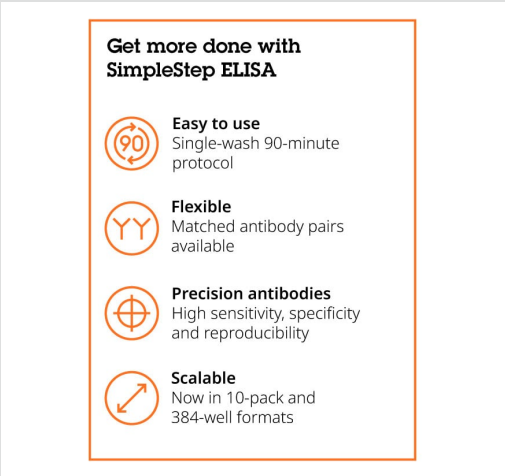
Sandwich ELISA - Human S100A4 ELISA Kit (ab283547)

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.



Interpolated concentrations of native S100A4 in human plasma - EDTA and cell culture supernatant samples.

The concentrations of S100A4 were measured in duplicates, interpolated from the S100A4 standard curves and corrected for sample dilution. Undiluted samples are as follows: plasma (EDTA) 40% and A172 supernatant 100%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean S100A4 concentration was determined to be 70.2 ng/mL in plasma (EDTA) and 3.95 ng/mL in A172 supernatant.



Sandwich ELISA - Human S100A4 ELISA Kit (ab283547)

To learn more about the advantages of SimpleStep ELISA® kits see **here**.

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