abcam

Product datasheet

Human GATA3 ELISA Kit ab230939

Recombinant SimpleStep ELISA

5 Images

Overview

Precision

Product name Human GATA3 ELISA Kit

Detection method Colorimetric

Sample	n	Mean	SD	CV%
T47D Cells	9			3.2%

Inter-assay

Intra-assay

Sample	n	Mean	SD	CV%
T47D Cells	3			4.39%

Sample type Cell culture extracts

Assay type Sandwich (quantitative)

Sensitivity 7.29 pg/ml

Range 62.5 pg/ml - 4000 pg/ml

Recovery Sample specific recovery

Sample type	Average %	Range	
Cell culture extracts	107	106% - 108%	

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Human

Product overview Human GATA3 ELISA Kit (ab230939) is a single-wash 90 min sandwich ELISA designed for the

> quantitative measurement of GATA3 protein in cell culture extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human GATA3 with 7.29 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

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 GATA3 Capture Antibody	1 x 600µl
10X Human GATA3 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent CPR2	1 x 6ml
Human GATA3 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

Transcriptional activator which binds to the enhancer of the T-cell receptor alpha and delta genes. Binds to the consensus sequence 5'-AGATAG-3'.

Tissue specificity

T-cells and endothelial cells.

Involvement in disease

 $\label{lem:defects} \mbox{Defects in GATA3 are the cause of hypoparathyroidism with sensor ineural deafness and renal}$

dysplasia (HDR) [MIM:146255]; also known as Barakat syndrome.

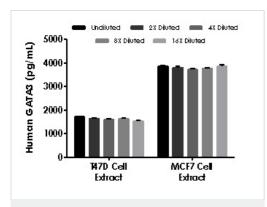
Sequence similarities

Contains 2 GATA-type zinc fingers.

Cellular localization

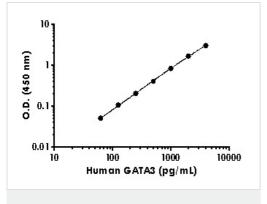
Nucleus.

Images

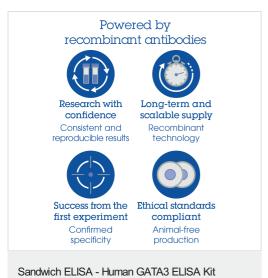


Interpolated concentrations of native GATA3 in human T47D and MCF7 cell extracts

The concentrations of GATA3 were measured in duplicates, interpolated from the GATA3 standard curves and corrected for sample dilution. Undiluted samples are as follows: T47D cell extract 50 $\mu g/mL$ and MCF7 cell extract 187.5 $\mu g/mL$. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean GATA3 concentration in the undiluted samples was determined to be 1,621 $\mu g/mL$ in T47D cell extract and 3,807 $\mu g/mL$ in MCF7 cell extract.



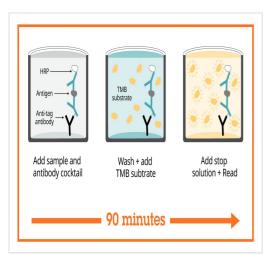
Example of human GATA3 standard curve in 1X Cell Extraction Buffer PTR The GATA3 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



(ab230939)

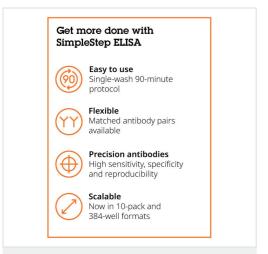
(ab230939)

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



Sandwich ELISA - Human GATA3 ELISA Kit

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 **here**.

Sandwich ELISA - Human GATA3 ELISA Kit (ab230939)

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