# abcam

## Product datasheet

# Human TIA1 ELISA Kit ab231921

Recombinant SimpleStep ELISA

5 Images

Overview

**Precision** 

**Product name** Human TIA1 ELISA Kit

**Detection method** Colorimetric

Sample	n	Mean	SD	CV%
Cell extract	5			6.8%

Inter-assay

Sample specific recovery

Intra-assay

Sample	n	Mean	SD	CV%
Cell extract	3			4.8%

Sample type Cell culture extracts

Assay type Sandwich (quantitative)

Sensitivity 117 pg/ml

Range 188 pg/ml - 12000 pg/ml

Recovery

Sample type	Average %	Range
Cell culture extracts	109	105% - 114%

Assay time 1h 30m

**Assay duration** One step assay

Species reactivity Reacts with: Human

**Product overview** Human TIA1 ELISA Kit (ab231921) is a single-wash 90 min sandwich ELISA designed for the

> quantitative measurement of TIA1 protein in cell culture extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human TIA1 with 117 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 TIA1 Capture Antibody	1 x 600µl
10X Human TIA1 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent 4BR	1 x 6ml
Human TIA1 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

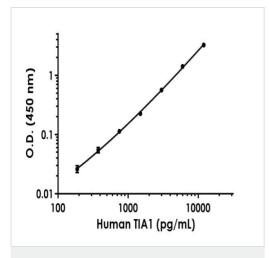
#### **Function**

Involved in alternative pre-RNA splicing and regulation of mRNA translation by binding to AU-rich elements (AREs) located in mRNA 3' untranslated regions (3' UTRs). Possesses nucleolytic activity against cytotoxic lymphocyte target cells. May be involved in apoptosis.

#### Sequence similarities

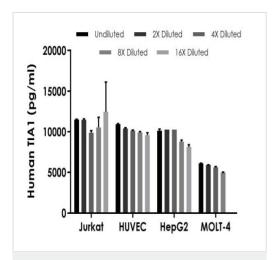
Contains 3 RRM (RNA recognition motif) domains.

#### **Images**



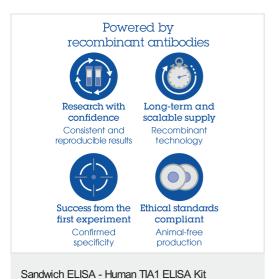
Example of human TIA1 standard curve in 1X Cell Extraction Buffer PTR.





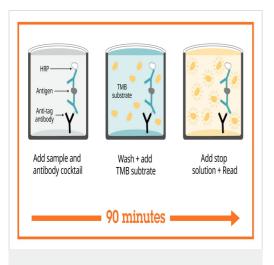
Interpolated concentrations of native TIA1 in human Jurkat, HUVEC, HepG2, and MOLT-4 cell extract samples based on 250 µg/mL, 500 µg/mL, 500 µg/mL, and 200 µg/mL extract loads, respectively.

The concentrations of TIA1 were measured in duplicate and interpolated from the TIA1 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean TIA1 concentration was determined to be 11,185 pg/mL in Jurkat, 10,313 pg/ml in HUVEC, 9394 pg/ml in HepG2, and 5,642 pg/mL in MOLT-4 cell extract samples.



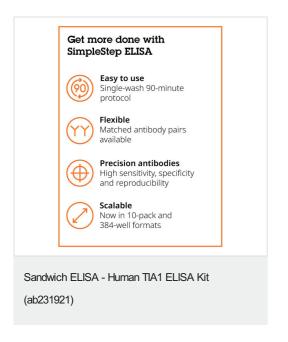
(ab231921)

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



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.

Sandwich ELISA - Human TIA1 ELISA Kit (ab231921)



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

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

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