

Recombinant SimpleStep ELISA®

5 Images

Overview

Human TRAF2 ELISA kit

Colorimetric

Intra-assay

Sample	n	Mean	SD	CV%
PC3 ext	5			2.5%

Inter-assay

Sample	n	Mean	SD	CV%
PC3 ext	3			1.1%

Cell culture extracts

Sandwich

1.5 ng/ml

1.6 ng/ml - 100 ng/ml

Sample specific recovery

Sample type	Average %	Range
Cell culture extracts	95	78% - 110%

1h 30m

One step assay

Reacts with: Human

Human TRAF2 ELISA kit (ab226893) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of TRAF2 protein in cell culture extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human TRAF2 with 1.5 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

TNF receptor-associated factor 2, or TRAF2, is a member of the TNF receptor associated protein family and is encoded by the TRAF2 gene. TRAF2 regulates activation of NF-kappa-B and JNK and plays a central role in the regulation of cell survival and apoptosis. It interacts with TNFR1 and other receptors including CD27, CD30, CD40, 4-1BB, OX40, HVEM/ATAR and LMP-1. TRAF2 also associates with a large number of intracellular proteins, including TRADD, FADD, ITRAF/TANK, TRIP, A20, c-IAP and 2, Casper, RIP and NIK, which help to regulate cell survival.

The standard is affinity purified.

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

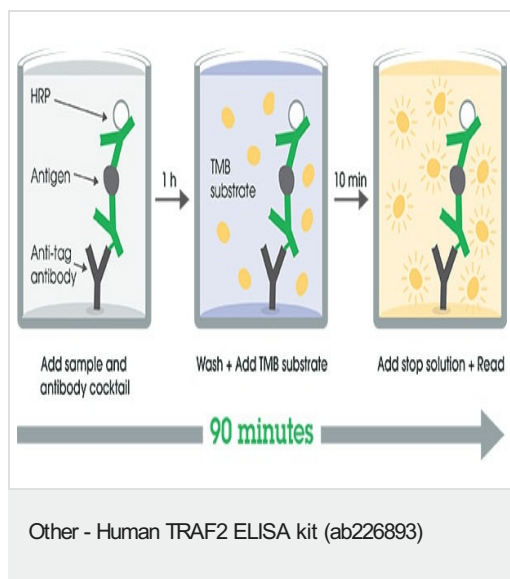
Storage instructions Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human TRAF2 Capture Antibody	1 x 600µl
10X Human TRAF2 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 CPI - HAMA Blocker (ab193969)	1 x 6ml
Human TRAF2 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml

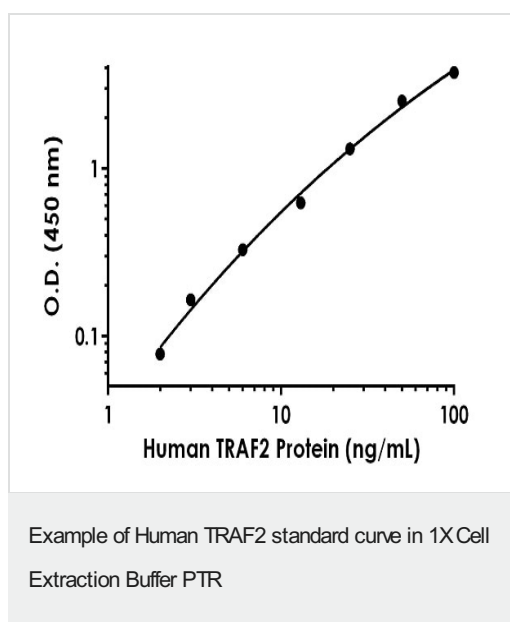
Components	1 x 96 tests
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

Function	Regulates activation of NF-kappa-B and JNK and plays a central role in the regulation of cell survival and apoptosis. Required for normal antibody isotype switching from IgM to IgG. Has E3 ubiquitin-protein ligase activity and promotes 'Lys-63'-linked ubiquitination of target proteins, such as BIRC3, RIPK1 and TICAM1. Is an essential constituent of several E3 ubiquitin-protein ligase complexes, where it promotes the ubiquitination of target proteins by bringing them into contact with other E3 ubiquitin ligases. Regulates BIRC2 and BIRC3 protein levels by inhibiting their autoubiquitination and subsequent degradation; this does not depend on the TRAF2 RING-type zinc finger domain.
Pathway	Protein modification; protein ubiquitination.
Sequence similarities	Belongs to the TNF receptor-associated factor family. A subfamily. Contains 1 MATH domain. Contains 1 RING-type zinc finger. Contains 2 TRAF-type zinc fingers.
Domain	The coiled coil domain mediates homo- and hetero-oligomerization. The MATH/TRAF domain binds to receptor cytoplasmic domains. The RING-type zinc finger domain is essential for E3 ubiquitin-protein ligase activity. It is not essential for the stabilization of BIRC2, or for the ubiquitination of RIPK1 in response to TNFR1 signaling.
Post-translational modifications	Phosphorylated at several serine residues within the first 128 amino acid residues. Phosphorylated at Thr-117 in response to signaling via TNF and TNFRSF1A. Phosphorylation at Thr-117 is required for 'Lys-63'-linked polyubiquitination, but not for 'Lys-48'-linked polyubiquitination. Phosphorylation at Thr-117 is important for interaction with IKKA and IKKB, activation of IKK and subsequent activation of NF-kappa-B. Undergoes both 'Lys-48'-linked and 'Lys-63'-linked polyubiquitination. Polyubiquitinated via 'Lys-63'-linked ubiquitin in response to TNF signaling; this requires prior phosphorylation at Thr-117. 'Lys-63'-linked polyubiquitination promotes TRAF2-mediated activation of NF-kappa-B. Can be polyubiquitinated at several Lys residues via 'Lys-48'-linked ubiquitin chains in response to TNF signaling, leading to proteasomal degradation. Autoubiquitinated, leading to its subsequent proteasomal degradation. Polyubiquitinated by BIRC2 and SIAH2, leading to its subsequent proteasomal degradation. Deubiquitinated by CYLD, a protease that specifically cleaves 'Lys-63'-linked polyubiquitin chains.
Cellular localization	Cytoplasm.

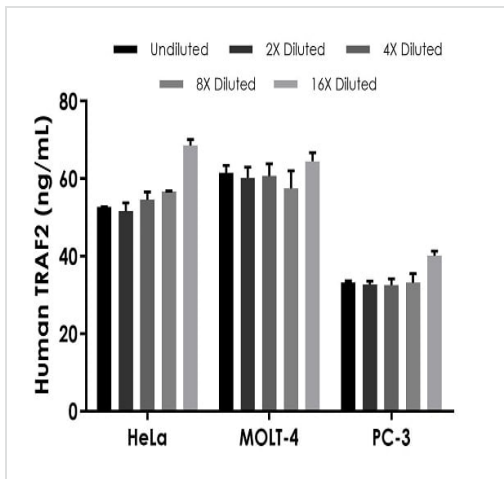
Images



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.

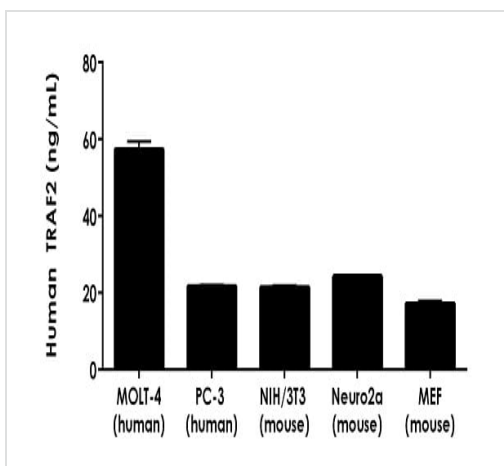


Background-subtracted data values (mean \pm SD) are graphed.



Interpolated concentrations of native TRAF2 in Human HeLa Cell Extract and MOLT-4 Cell Extract based on a 1,000 µg/mL extract load, and Human PC-3 Cell Extract based on a 1,500 µg/mL extract load

The concentrations of TRAF2 were measured in duplicate and interpolated from the TRAF2 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean TRAF2 concentration was determined to be 57 ng/mL in HeLa, 61 ng/mL in MOLT-4, and 34 ng/ml in PC-3.



Mouse extracts were assayed for reactivity

Interpolated concentrations of native TRAF2 in human and mouse extracts based on a 1,000 µg/mL extract load. The concentrations of native TRAF2 were measured in duplicate, interpolated from the human TRAF2 standard curve, and corrected for sample dilution. The mean TRAF2 concentrations are plotted (n=5).

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 TRAF2 ELISA kit
(ab226893)

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

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

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