abcam

Product datasheet

STAT5 A/B pY694/699 ELISA Kit ab176656

SimpleStep ELISA

5 Images

Overview

Product name STAT5 A/B pY694/699 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
A431 extract	6			2.8%

Inter-assay

Sample	n	Mean	SD	CV%
A431 extract	3			4%

Sample type Cell culture extracts, Adherent cells, Suspension cells, Tissue Homogenate

Assay type Semi-quantitative

Sensitivity < 5 µg/ml

Range 10 µg/ml - 1000 µg/ml

Assay time 1h 30m

Assay duration One step assay

Species reactivity **Reacts with:** Human

Predicted to work with: Mouse, Rat

Product overview Abcam's STAT5 A/B (pY694/699) *in vitro* SimpleStep ELISA™ (Enzyme-Linked Immunosorbent Assay) kit is designed for the semi-quantitative measurement of STAT5 A/B (pY694/699) protein in Human cells.

The SimpleStep ELISA™ employs an affinity tag labeled capture antibody and a reporter conjugated detector antibody which immunocapture the sample analyte in solution. This entire complex (capture antibody/analyte/detector antibody) is in turn immobilized via immunoaffinity of an anti-tag antibody coating the well. To perform the assay, samples or standards are added to the wells, followed by the antibody mix. After incubation, the wells are washed to remove unbound material. TMB substrate is added and during incubation is catalyzed by HRP, generating blue

coloration. This reaction is then stopped by addition of Stop Solution completing any color change from blue to yellow. Signal is generated proportionally to the amount of bound analyte and the intensity is measured at 450 nm. Optionally, instead of the endpoint reading, development of TMB can be recorded kinetically at 600 nm

Notes

Abcam's STAT5 A/B (pY694/699) SimpleStep ELISA kit (ab176656) has been re-developed with new detector antibody. From February 18, 2016 the kit will be delivered with a new detector total STAT5 antibody. This change was necessary because of a decrease in the performance of the polyclonal STAT5 antibody that was previously used for detection in recent production lots. We have identified a new antibody to use in the SimpleStep ELISA platform that provides higher performance.

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

Microplate

Properties

Storage instructions

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

Components	1 x 96 tests	1 x 96 tests
10X Wash Buffer PT	1 x 15ml	1 x 15ml
50X Cell Extraction Enhancer Solution	1 x 1ml	1 x 1ml
5X Cell Extraction Buffer PTR	1 x 12ml	1 x 12ml
Lyophilized STAT5 A/B Control Lysate	1 vial	1 vial
Plate Seal	1 unit	1 unit
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 unit
STAT5 A/B (pY694/699) Capture Antibody	1 x 3ml	1 x 3ml
STAT5 A/B (pY694/699) Detector Antibody	1 x 3ml	1 x 3ml
Stop Solution	1 x 12ml	1 x 12ml
TMB Substrate	1 x 12ml	1 x 12ml

Function

Carries out a dual function: signal transduction and activation of transcription. Binds to the GAS element and activates PRL-induced transcription.

Sequence similarities

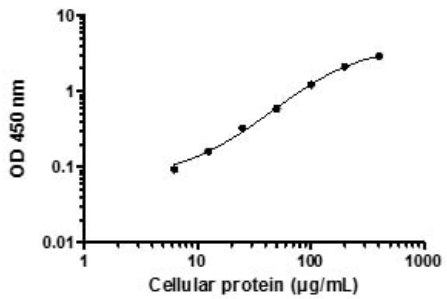
Belongs to the transcription factor STAT family.
Contains 1 SH2 domain.

Post-translational modifications

Tyrosine phosphorylated in response to IL-2, IL-3, IL-7, IL-15, GM-CSF, growth hormone, prolactin, erythropoietin and thrombopoietin. Tyrosine phosphorylation is required for DNA-binding activity and dimerization. Serine phosphorylation is also required for maximal transcriptional activity.

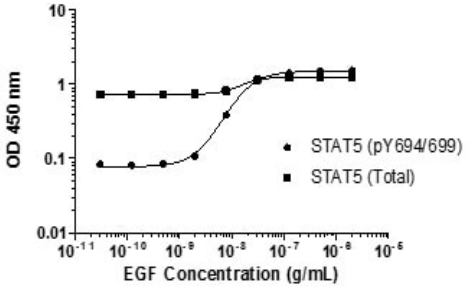
Cellular localization	Cytoplasm. Nucleus. Translocated into the nucleus in response to phosphorylation.

Images



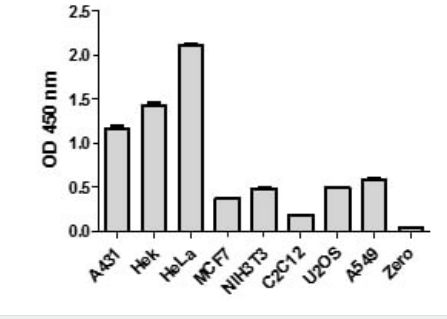
Typical cell lysate dilution series

Example of a typical STAT5 A/B (pY694/699) cell lysate dilution series. Background-subtracted data values (mean +/- SD) are graphed.



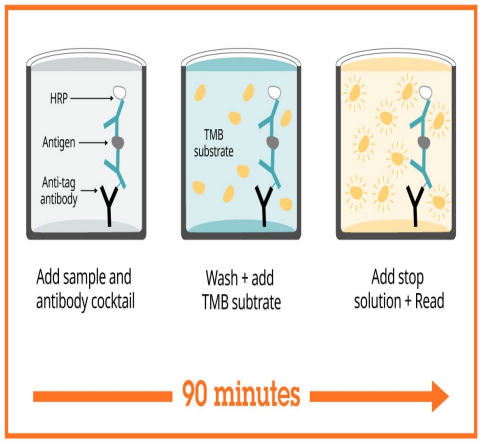
Induction of STAT5 A/B (pY694/699) phosphorylation in A431 cells in response to EGF treatment.

A431 cells were cultured in 96-well tissue culture plates and treated (15 min) with a dose-range of EGF before cell lysis. Data from quadruplicate measurements of STAT5 A/B (pY694/699) are plotted and compared against Total STAT5 A/B levels.



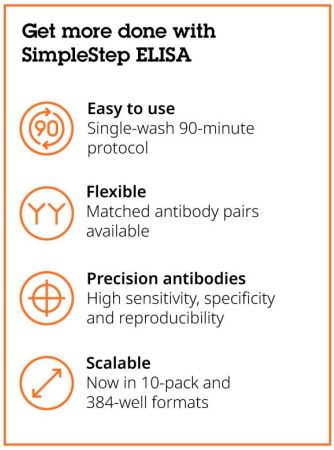
Cell line analysis for Total STAT5 A/B

Cell line analysis for Total STAT5 A/B from 100 µg/mL preparations of cell extracts. Data from triplicate measurements (mean +/- SD) are plotted and compared to 1X Cell Extraction Buffer PTR (zero).



Sandwich ELISA - STAT5 A/B pY694/699 ELISA Kit (ab176656)

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.



Sandwich ELISA - STAT5 A/B pY694/699 ELISA Kit (ab176656)

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

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