abcam

## Product datasheet

# p70S6K (pT389 + Total) ELISA Kit ab225582

SimpleStep ELISA®

6 Images

### Overview

**Product name** p70S6K (pT389 + Total) ELISA Kit

**Detection method** Colorimetric

**Precision**

Intra-assay

| Sample | n | Mean | SD | CV% |
|---|---|---|---|---|
| pT389 | 6 | | | 3.3% |
| Total | 6 | | | 4.5% |

Inter-assay

| Sample | n | Mean | SD | CV% |
|---|---|---|---|---|
| pT389 | 3 | | | 2.9% |
| Total | 3 | | | 4.1% |

**Sample type** Cell Lysate, Tissue Homogenate

**Assay type** Semi-quantitative

**Assay time** 1h 30m

**Assay duration** One step assay

**Species reactivity** **Reacts with:** Mouse, Human

**Predicted to work with:** Rat

**Product overview** Abcam's p70S6K (pT389) and p70S6K (Total) *in vitro* SimpleStep ELISA™ (Enzyme-Linked Immunosorbent Assay) kit is designed for the semi-quantitative measurement of p70S6K (pT389) and Total p70S6K protein in Human and mouse 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 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

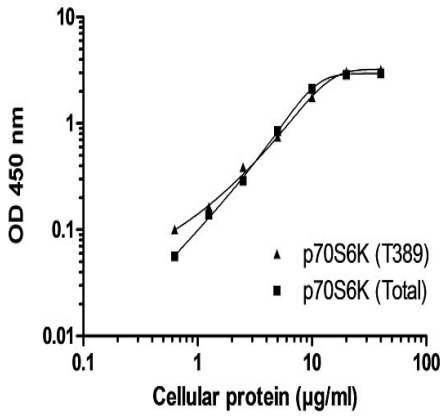
## Properties

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

| Components | 1 x 96 tests |
|---|---|
| 10X Wash Buffer PT | 1 x 15ml |
| 50X Cell Extraction Enhancer Solution | 1 x 1ml |
| 5X Cell Extraction Buffer PTR | 1 x 12ml |
| Lyophilized p38 MAPK alpha Control Lysate | 1 vial |
| p70S6K (pT389) Capture Antibody | 1 x 1.5ml |
| p70S6K (pT389) Detector Antibody | 1 x 1.5ml |
| p70S6K (Total) Capture Antibody | 1 x 1.5ml |
| p70S6K (Total) Detector Antibody | 1 x 1.5ml |
| Plate Seal | 1 unit |
| SimpleStep Pre-Coated 96 Well Microplate (12 x 8 well strips) | 1 unit |
| Stop Solution | 1 x 12ml |
| TMB Substrate | 1 x 12ml |

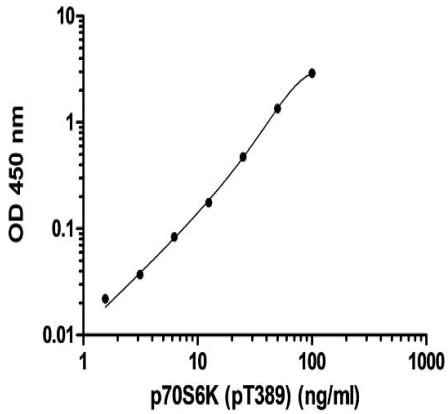
**Cellular localization** P70 S6 Kinase: Cell junction › synapse › synaptosome By similarity. Mitochondrion outer membrane. Mitochondrion. Note: Colocalizes with URI1 at mitochondrion. Isoform Alpha I: Nucleus. Cytoplasm Isoform Alpha II: Cytoplasm

## Images



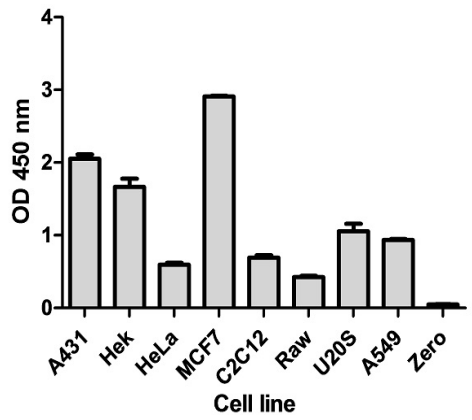

Example of p70S6K (pT389) and p70S6K (Total) cell lysate standard curve

Background-subtracted data values (mean +/- SD) are graphed.



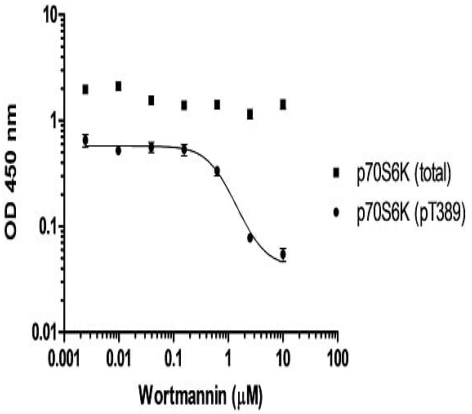

Example of p70S6K (pT389) recombinant protein standard curve

Background-subtracted data values (mean +/- SD) are graphed.



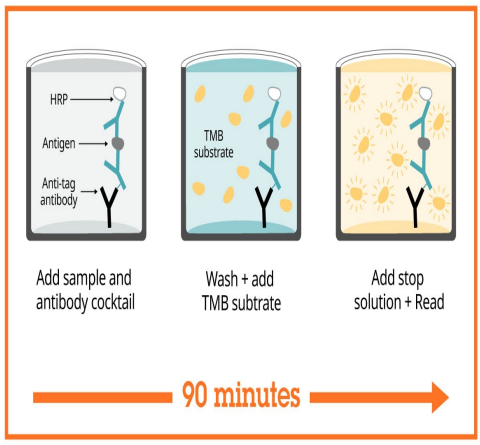

Cell line analysis for Total p70S6K from 100 µg/mL preparations of cell extracts

Data from triplicate measurements (mean +/- SD) are plotted and compared to 1X Cell Extraction Buffer PTR (zero).



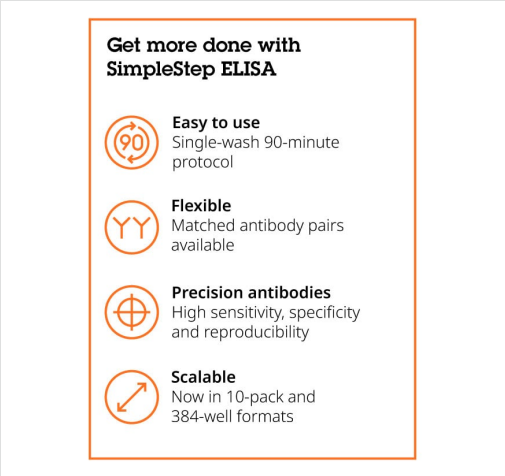

Inhibition of p70S6K (pT389) phosphorylation in MCF-7 cells in response to wortmannin treatment

MCF-7 cells were cultured in 96-well tissue culture plates, and treated (2 h) with a dose-range of wortmannin before stimulation with insulin (10 µg/mL for 30 min) and cell lysis. Data from triplicate measurements of p70S6K (pT389) are plotted and compared against total p70S6K protein levels.




Sandwich ELISA - p70S6K (pT389 + Total) ELISA Kit (ab225582)

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 - p70S6K (pT389 + Total) ELISA Kit (ab225582)

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

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

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