abcam

Product datasheet

ERK1/2 (pT202/Y204) ELISA Kit ab176640

SimpleStep ELISA

1 Abreviews 12 References 6 图像

概述

产品名称 ERK1/2 (pT202/Y204) ELISA试剂盒

检测方法 Colorimetric

精确度

批次内

样品	n	Mean	SD	CV%
A431 extract	6			3.3%

批次间

样品	n	Mean	SD	CV%
A431 extract	3			1.3%

样品类型 Cell Lysate, Tissue Homogenate

检测类型 Semi-quantitative

灵敏度 0.1 ng/ml

范围 0.2 ng/ml - 20 ng/ml

检测时间 1h 30m

实验步骤 One step assay

种属反应性 **与反应:** Mouse, Human

预测可用于: Rat

产品概述 ERK1/2 (pT202/Y204) *in vitro* SimpleStep ELISA™ (Enzyme-Linked Immunosorbent Assay) kit is designed for the semi-quantitative measurement of ERK1/2 (pT202/Y204) 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.

As of October 2019, this kit was reformulated with new antibodies to maintain continued long term supply.

说明

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.

平台

Microplate

性能

存放说明

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

组件	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
ERK1/2 (pT202/Y204) Capture Antibody	1 x 3ml	1 x 3ml
ERK1/2 (pT202/Y204) Detector Antibody	1 x 3ml	1 x 3ml
Lyophilized ERK1/2 Control Lysate	1 vial	1 vial
Plate Seal	1 unit	1 unit
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit	1 unit
Stop Solution	1 x 12ml	1 x 12ml
TMB Substrate	1 x 12ml	1 x 12ml

功能

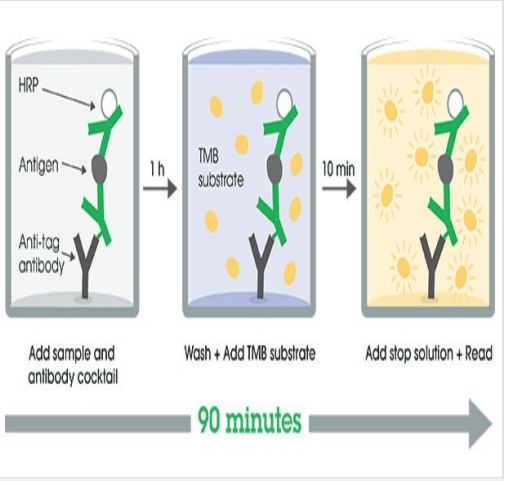
Involved in both the initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors such as ELK1. Phosphorylates EIF4EBP1; required for initiation of translation. Phosphorylates microtubule-associated protein 2 (MAP2). Phosphorylates SPZ1 (By similarity). Phosphorylates heat shock factor protein 4 (HSF4) and ARHGEF2.
Acts as a transcriptional repressor. Binds to a [GC]AAA[GC] consensus sequence. Repress the expression of interferon gamma-induced genes. Seems to bind to the promoter of CCL5, DMP1, IFIH1, IFITM1, IRF7, IRF9, LAMP3, OAS1, OAS2, OAS3 and STAT1. Transcriptional activity is independent of kinase activity.

序列相似性

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.

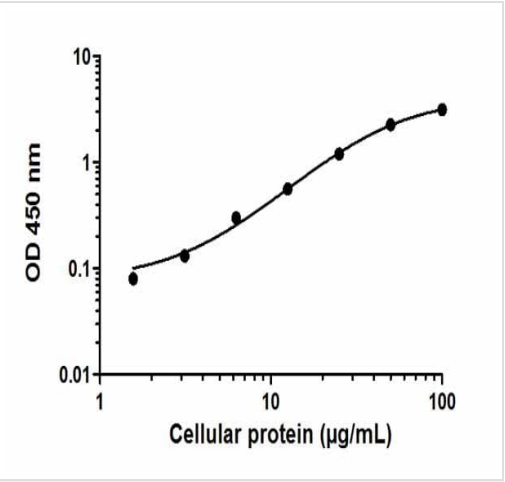
	Contains 1 protein kinase domain.
结构域	The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.
翻译后修饰	Dually phosphorylated on Thr-185 and Tyr-187, which activates the enzyme. Dephosphorylated by PTPRJ at Tyr-187.
细胞定位	Nucleus.

图片



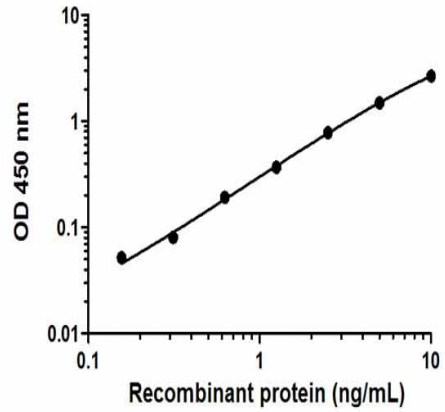
Other - ERK1/2 (pT202/Y204) ELISA Kit (ab176640)

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.



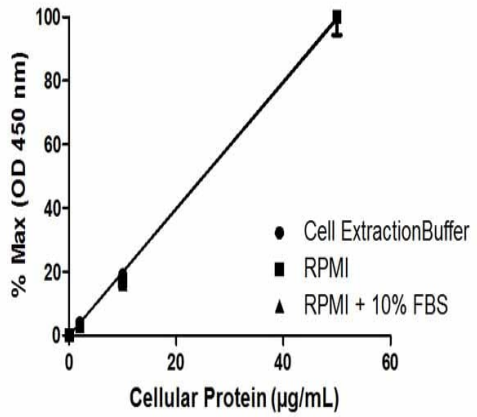
Typical cell lysate dilution series

Example of a typical ERK1/2 (pT202/Y204) cell lysate dilution series. Background-subtracted data values (mean +/- SD) are graphed.



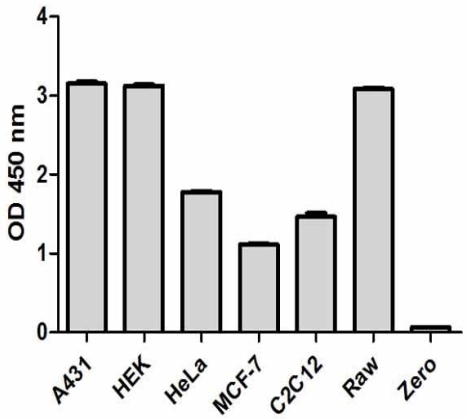
Typical recombinant protein standard curve

Example of a typical ERK1/2 (pT202/Y204) recombinant protein standard curve. The proportion of total protein that is phosphorylated is unknown - data is indicative only. Background-subtracted data values (mean +/- SD) are graphed.



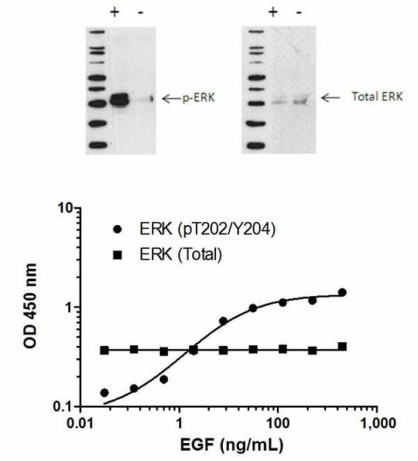
Linearity of dilution

Linearity of dilution in representative sample matrices. Cellular lysates were prepared at 3 concentrations in common media containing 1X Cell Extraction Buffer PTR. Data from duplicate measurements of ERK1/2 (pT202/Y204) are normalized and plotted.



Comparison of total ERK1/2 expression in different cell lines

Cell line analysis for Total ERK1/2 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).



ERK1/2 (pT202/Y204) phosphorylation in response to EGF treatment.

Induction of ERK1/2 (pT202/Y204) phosphorylation in MCF-7 cells in response to EGF treatment. MCF-7 cells were cultured in 96-well tissue culture plates, serum starved and treated (10 min) with a dose-range of EGF before cell lysis. Data from quadruplicate measurements of ERK1/2 (pT202/Y204) are plotted and compared against Total ERK1/2 protein levels. Comparative ERK1/2 (pT202/Y204) and ERK1/2 (Total) data also shown by Western Blot.

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit **https://www.abcam.cn/abpromise** or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors