

## Product datasheet

### HRP Anti-ERK1 + ERK2 antibody [EPR17526] ab209321

Recombinant RabMAb

2 Images

#### Overview

<b>Product name</b>	HRP Anti-ERK1 + ERK2 antibody [EPR17526]
<b>Description</b>	HRP Rabbit monoclonal [EPR17526] to ERK1 + ERK2
<b>Host species</b>	Rabbit
<b>Conjugation</b>	HRP
<b>Tested applications</b>	<b>Suitable for:</b> WB
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: HeLa, HepG2, RAW 264.7, NIH 3T3, C6 and PC12 whole cell and Human Fetal Heart tissue lysates. Also ERK1 Recombinant Protein and ERK2 Recombinant Protein (data not shown).
<b>General notes</b>	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle. Store in the Dark.
<b>Storage buffer</b>	<p>pH: 7.40</p> <p>Preservative: 0.1% Proclin 300 Solution</p> <p>Constituents: PBS, 30% Glycerol (glycerin, glycerine), 1% BSA</p>
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR17526

Isotype

IgG

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab209321 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/5000. Detects a band of approximately 41, 39 kDa (predicted molecular weight: 43, 41 kDa).

## Target

### Function

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.

### Sequence similarities

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily. Contains 1 protein kinase domain.

### Domain

The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.

### Post-translational modifications

Dually phosphorylated on Thr-185 and Tyr-187, which activates the enzyme. Dephosphorylated by PTPRJ at Tyr-187.

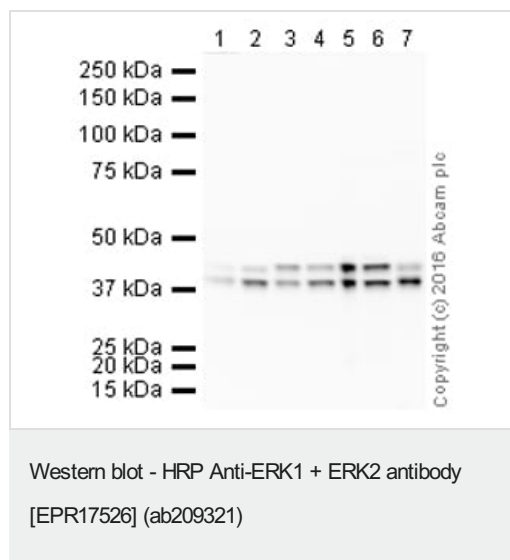
### Cellular localization

Nucleus.

### Form

Mainly expressed in the cytoplasm and only localizes to the nucleus with treatment.

## Images



**All lanes :** HRP Anti-ERK1 + ERK2 antibody [EPR17526] (ab209321) at 1/5000 dilution

**Lane 1 :** HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 2 :** HepG2 (Human hepatocellular liver carcinoma cell line) Whole Cell Lysate

**Lane 3 :** RAW 264.7 (Mouse leukaemic monocyte macrophage cell line) Whole Cell Lysate

**Lane 4 :** NIH 3T3 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

**Lane 5 :** C6 (Rat glioma cell line) Whole Cell Lysate

**Lane 6 :** PC12 (Rat adrenal pheochromocytoma cell line) Whole Cell Lysate

**Lane 7 :** Heart (Human) Tissue Lysate - fetal normal tissue

Lysates/proteins at 10 µg per lane.

Developed using the ECL technique.

Performed under reducing conditions.

**Predicted band size:** 43, 41 kDa

**Observed band size:** 39,41 kDa

**Exposure time:** 30 seconds

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab209321 overnight at 4°C. Antibody binding was visualised using ECL development solution [ab133406](#).

### Why choose a recombinant antibody?



**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

HRP Anti-ERK1 + ERK2 antibody [EPR17526]  
(ab209321)

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

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- Response to your inquiry within 24 hours
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