

Product datasheet

Anti-ERK2 antibody [E460] (HRP) ab205819

KO VALIDATED Recombinant RabMAb

2 Images

Overview

Product name	Anti-ERK2 antibody [E460] (HRP)
Description	Rabbit monoclonal [E460] to ERK2 (HRP)
Host species	Rabbit
Conjugation	HRP
Tested applications	Suitable for: WB
Species reactivity	Reacts with: Mouse, Rat, Human, Recombinant fragment
Immunogen	Synthetic peptide within Human ERK2 aa 300 to the C-terminus (C terminal). The exact sequence is proprietary. Database link: P28482 (Peptide available as ab205612)
Positive control	WB: HeLa, 46C, PC12 whole cell lysates and Human ERK2 recombinant protein lysate.
General notes	<p>Alternative versions available: Anti-ERK2 antibody [E460] (ab32081) - Knockout validated</p> <p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p> <p>Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.</p> <p>Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.</p> <p>We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise[™] guarantee.</p> <p>In preparation for this, we have started to update the applications & species that this product is</p>

Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

Properties

Form	Liquid
Storage instructions	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.
Storage buffer	pH: 7.40 Preservative: 0.1% 10% Proclin 300 Solution Constituents: 30% Glycerol, 1% BSA, PBS
Purity	Protein A purified
Clonality	Monoclonal
Clone number	E460
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab205819** 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 kDa (predicted molecular weight: 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, IFI1, IFITM1, IRF7, IRF9, LAMP3, OAS1, OAS2, OAS3 and STAT1. Transcriptional activity is independent of kinase activity.
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Sequence similarities	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase
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subfamily.
Contains 1 protein kinase domain.

Domain

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

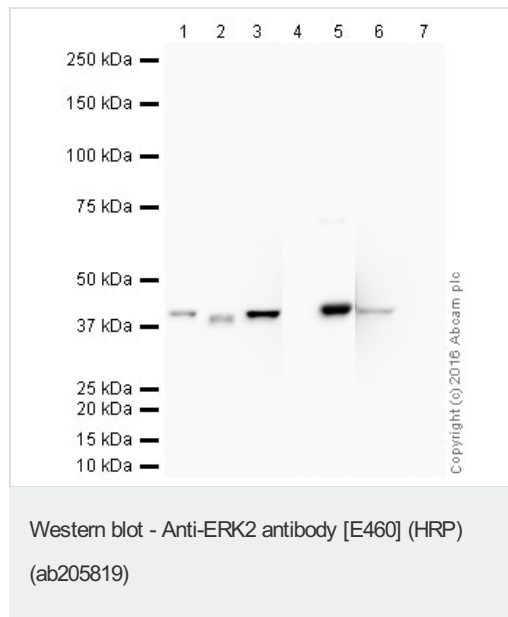
Post-translational modifications

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

Cellular localization

Nucleus.

Images



All lanes : Anti-ERK2 antibody [E460] (HRP) (ab205819) at 1/5000 dilution

Lane 1 : HeLa whole cell lysate (ab150035) at 10 µg

Lane 2 : 46C (Mouse neural progenitor, selected for Sox1 expression cell line) Whole Cell Lysate at 10 µg

Lane 3 : PC12 (Rat adrenal pheochromocytoma cell line) Whole Cell Lysate at 10 µg

Lane 4 : Recombinant Human ERK1 protein (ab43623) (ab43623) at 0.1 µg

Lane 5 : Recombinant Human ERK2 protein (ab43625) at 0.1 µg

Lane 6 : Wild-type HAP1 cell lysate at 20 µg

Lane 7 : ERK2 knockout HAP1 cell lysate at 20 µg

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 41 kDa

Observed band size: 41 kDa

Exposure time: 12 minutes

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 3% milk before being incubated with ab205819 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

Anti-ERK2 antibody [E460] (HRP) (ab205819)

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

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