

### Anti-ERK1 antibody [E19] ab78918

[2 Images](#)

#### Overview

<b>Product name</b>	Anti-ERK1 antibody [E19]
<b>Description</b>	Mouse monoclonal [E19] to ERK1
<b>Host species</b>	Mouse
<b>Specificity</b>	Recognizes only the ERK1 protein (e.g.: from human and mouse cells)
<b>Tested applications</b>	<b>Suitable for:</b> WB, IP
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Recombinant full length protein corresponding to Human ERK1 aa 1-379. Database link: <a href="#">P27361</a>
<b>Positive control</b>	HEK293 and Jurkat cell lysates.
<b>General notes</b>	For longer term storage add 0.1% Na Azide.  The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. 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, along with publications, customer reviews and Q&As

#### Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.20 Constituent: 0.0268% PBS
<b>Purity</b>	Protein G purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	E19
<b>Isotype</b>	IgG1

## Applications

### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab78918 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		1/1000 - 1/10000. Detects a band of approximately 43 kDa (predicted molecular weight: 43 kDa).
IP		Use a concentration of 0.5 - 2 µg/ml.

## 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 ELK-1. Phosphorylates EIF4EBP1; required for initiation of translation. Phosphorylates microtubule-associated protein 2 (MAP2). Phosphorylates SPZ1 (By similarity). Phosphorylates heat shock factor protein 4 (HSF4).

### Sequence similarities

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

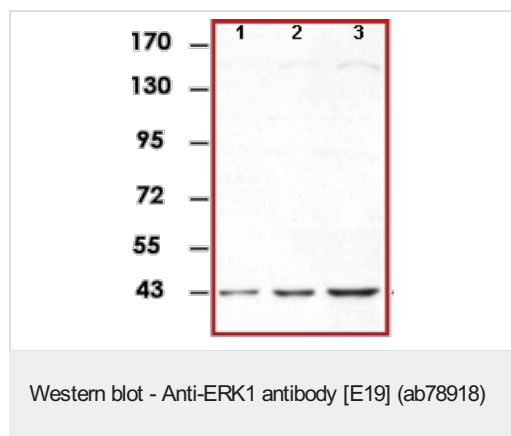
### Domain

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

### Post-translational modifications

Dually phosphorylated on Thr-202 and Tyr-204, which activates the enzyme. Dephosphorylated by PTPRJ at Tyr-204.

## Images



**All lanes :** Anti-ERK1 antibody [E19] (ab78918) at 1/10000 dilution

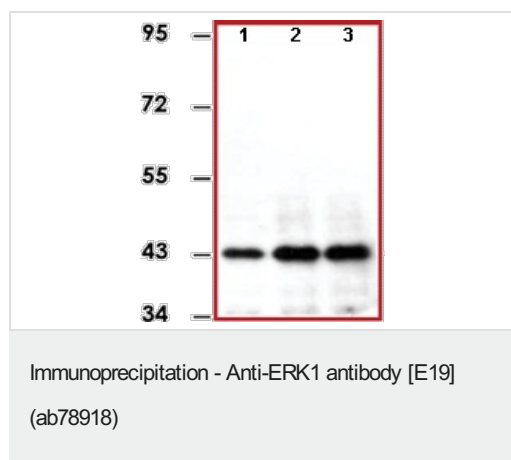
**Lane 1 :** HEK293 cell lysate at 1 µg/ml

**Lane 2 :** HEK293 cell lysate at 5 µg/ml

**Lane 3 :** HEK293 cell lysate at 10 µg/ml

**Predicted band size:** 43 kDa

**Observed band size:** 43 kDa



Detection of ERK1 by Western Blot of Immunoprecipitate.  
ab78918 at 0.5 $\mu$ g, 1 $\mu$ g, and 2 $\mu$ g (lanes 1-3 respectively)  
immunoprecipitating ERK1 from 50 $\mu$ g Jurkat cell lysate.

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

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- Replacement or refund for products not performing as stated on the datasheet
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- 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
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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.com/abpromise> or contact our technical team.

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