**Product datasheet**

**Anti-ERK1 + ERK2 antibody ab196883**

18 References  2 Images

**Overview**

**Product name**
Anti-ERK1 + ERK2 antibody

**Description**
Rabbit polyclonal to ERK1 + ERK2

**Host species**
Rabbit

**Tested applications**
Suitable for: WB

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

**Immunogen**
Synthetic peptide within Human ERK 1/2 (Total) (internal sequence). The exact sequence is proprietary.

Database link: [P28482](https://www.uniprot.org/uniprot/P28482)

**Positive control**
WB: K562 and NIH/3T3 cell lysates.

**Properties**

**Form**
Liquid

**Storage instructions**

**Storage buffer**
pH: 7.40  
Preservative: 0.02% Sodium azide  
Constituents: 50% Glycerol, PBS, 0.87% Sodium chloride

PBS without Mg$^{2+}$ and Ca$^{2+}$

**Purity**
Immunogen affinity purified

**Clonality**
Polyclonal

**Isotype**
IgG

**Applications**

Our [Abpromise guarantee](https://www.abcam.com/abpromise) covers the use of ab196883 in the following tested applications.

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

### Images

<table>
<thead>
<tr>
<th>Application</th>
<th>Abreviews</th>
<th>Notes</th>
</tr>
</thead>
</table>

**All lanes**: Anti-ERK1 + ERK2 antibody (ab196883) at 1/500 dilution

**Lane 1**: NIH/3T3 (Mouse embryo fibroblast cell line) cell extract

**Lane 2**: NIH/3T3 (Mouse embryo fibroblast cell line) cell extract with synthesized peptide

**Predicted band size**: 41 kDa
Western blot - Anti-ERK1 + ERK2 antibody (ab196883)

**All lanes**: Anti-ERK1 + ERK2 antibody (ab196883) at 1/500 dilution

**Lane 1**: K562 (Human chronic myelogenous leukemia cell line from bone marrow) cell extract with synthesized peptide

**Lane 2**: K562 (Human chronic myelogenous leukemia cell line from bone marrow) cell extract

**Predicted band size**: 41 kDa

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**Please note**: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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