

Anti-ERK1 + ERK2 antibody [ERK-7D8] ab54230

★★★★★ [2 Abreviews](#) [114 References](#) [4 图像](#)

概述

产品名称	Anti-ERK1 + ERK2抗体[ERK-7D8]
描述	小鼠单克隆抗体[ERK-7D8] to ERK1 + ERK2
宿主	Mouse
经测试应用	适用于: IHC-P, ICC/IF
种属反应性	与反应: Mouse, Human 预测可用于: Rat 
免疫原	Synthetic peptide corresponding to Rat ERK1 + ERK2 aa 324-345. Sequence: EALAHPPYLEQYYDPTDEPVAEE Database link: P21708 <div>  Run BLAST with  Run BLAST with </div>
阳性对照	ICC/IF: U-87 MG (human glioblastoma-astrocytoma epithelial cell line) cells. IHC-P: Human breast carcinoma tissue. Mouse stomach tissue. Human cortex tissue. WB: Recombinant human ERK1 protein (ab116536), Human granulosa cell line whole cell lysate.
常规说明	<p>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.</p> <p>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</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40 Preservative: 0.05% Sodium azide Constituent: PBS

纯度	Immunogen affinity purified
克隆	单克隆
克隆编号	ERK-7D8
同种型	IgG1
轻链类型	kappa

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab54230于以下的经测试应用

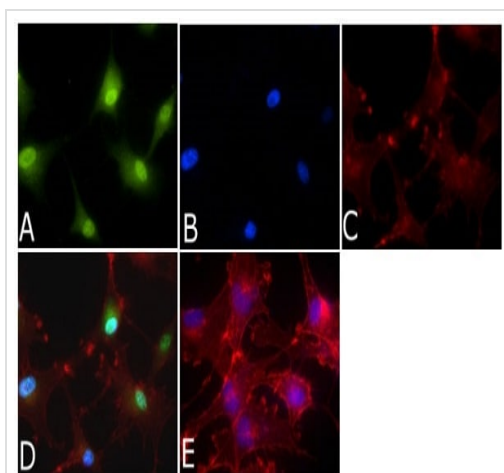
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P		1/10 - 1/100. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
ICC/IF	★★★★★ (1)	Use a concentration of 1 µg/ml.

靶标

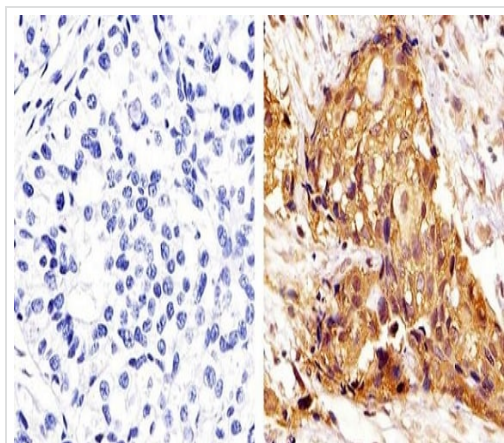
功能	<p>Involved in both the initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors such as ELK1. Phosphorylates EIF4EBP1; required for initiation of translation. Phosphorylates microtubule-associated protein 2 (MAP2). Phosphorylates SPZ1 (By similarity). Phosphorylates heat shock factor protein 4 (HSF4) and ARHGEF2.</p> <p>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.</p>
序列相似性	<p>Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.</p> <p>Contains 1 protein kinase domain.</p>
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.
形式	Mainly expressed in the cytoplasm and only localizes to the nucleus with treatment.

图片



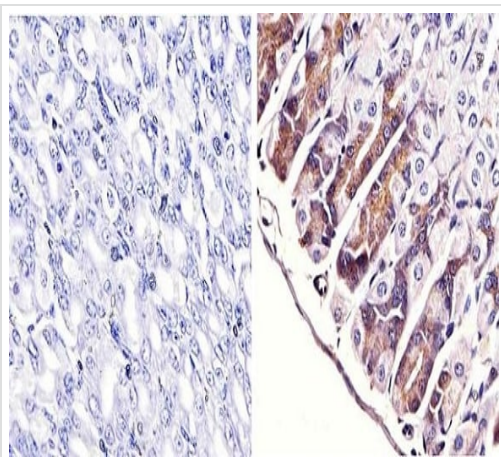
Immunocytochemistry/ Immunofluorescence - Anti-ERK1 + ERK2 antibody [ERK-7D8] (ab54230)

Immunocytochemistry/ Immunofluorescence analysis of ERK1 + ERK2 Antibody (ab54230) was done on 70% confluent log phase U87-MG cells. The cells were fixed with 4% paraformaldehyde for 15 minutes, permeabilized with 0.25% Triton™ X-100 for 10 minutes, and blocked with 5% BSA for 1 hour at room temperature. The cells were labeled with ERK1 + ERK2 Antibody [ERK-7D8] (ab54230) at 1µg/mL in 1% BSA and incubated for 3 hours at room temperature and then labeled with Alexa Fluor 488® Rabbit Anti-Mouse IgG Secondary Antibody at a dilution of 1/400 for 45 minutes at room temperature (Panel a: green). Nuclei (Panel b: blue) were stained with DAPI. F-actin (Panel c: red) was stained with Alexa Fluor 594® Phalloidin. Panel d is a merged image showing cytoplasmic and nuclear localization. Panel e is a no primary antibody control. The images were captured at 40X magnification.



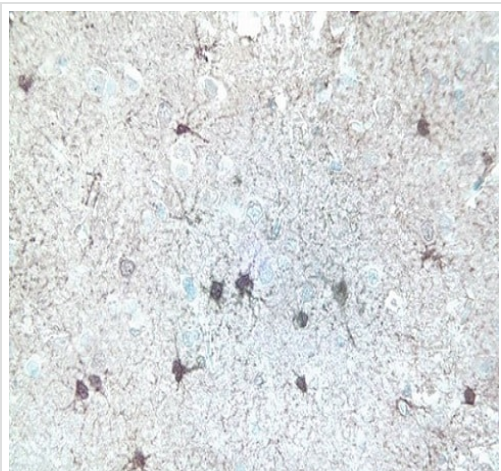
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ERK1 + ERK2 antibody [ERK-7D8] (ab54230)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue labeling ERK1 + ERK2 with ab54230. Staining in the cytoplasm and nucleus (right), compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H₂O₂-methanol for 15 min at room temperature, washed with ddH₂O and PBS, and then probed with a ERK1/2 monoclonal antibody (ab54230) diluted in 3% BSA-PBS at a dilution of 1/50 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ERK1 + ERK2 antibody [ERK-7D8] (ab54230)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of mouse stomach tissue labeling ERK1 + ERK2 with ab54230. Staining in the cytoplasm and nucleus (right) compared to a negative control without primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H₂O₂-methanol for 15 min at room temperature, washed with ddH₂O and PBS, and then probed with a ERK1/2 monoclonal antibody (ab54230) diluted in 3% BSA-PBS at a dilution of 1/20 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ERK1 + ERK2 antibody [ERK-7D8] (ab54230)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cortex tissue labeling ERK1 + ERK2 with ab54230.

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