# abcam

# Product datasheet

# Alexa Fluor® 555 Anti-ERK1 + ERK2 antibody [EPR17526] ab210659

Recombinant RabMAb

# 2 Images

#### Overview

**Product name** Alexa Fluor® 555 Anti-ERK1 + ERK2 antibody [EPR17526]

**Description** Alexa Fluor® 555 Rabbit monoclonal [EPR17526] to ERK1 + ERK2

**Host species** Rabbit

Conjugation Alexa Fluor® 555. Ex: 555nm. Em: 565nm

**Tested applications** Suitable for: ICC/IF Species reactivity Reacts with: Human

Predicted to work with: Mouse, Rat

Recombinant fragment within Human ERK1 + ERK2 aa 150 to the C-terminus. The exact **Immunogen** 

> immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please

contact our Scientific Support team to discuss your requirements.

Database link: P28482

Positive control ICC/IF: A431 cells

General notes This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility
- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

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## **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.

Stable for 12 months at -20°C. Store In the Dark.

**Storage buffer** pH: 7.40

Preservative: 0.02% Sodium azide

Constituents: PBS, 1% BSA, 30% Glycerol (glycerin, glycerine)

Purity Protein A purified

Clonality Monoclonal
Clone number EPR17526

**Isotype** IgG

#### **Applications**

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab210659 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
ICC/IF		1/500. This product gave a positive signal in A431 cells fixed with 100% methanol (5 min)

#### **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 ElF4EBP1; 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.

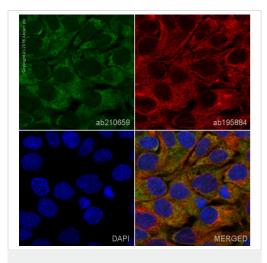
**Cellular localization** 

Nucleus.

**Form** 

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

#### **Images**



Immunocytochemistry/ Immunofluorescence - Alexa Fluor® 555 Anti-ERK1 + ERK2 antibody [EPR17526] (ab210659) ab210659 staining ERK1 + ERK2 in A431 cells. The cells were fixed with 100% methanol (5min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at +4°C with ab210659 at 1/500 dilution (pseudocolored in green) and ab195884, Rat monoclonal to Tubulin (Alexa Fluor<sup>®</sup> 647), at 1/250 dilution (shown in red). Nuclear DNA was labelled with DAPI (shown in blue).

Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



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