

Product datasheet

Anti-ERK2 antibody ab7948

★★★★★ 1 Abreviews 3 References 3 Images

Overview

| | |
|----------------------------|---|
| Product name | Anti-ERK2 antibody |
| Description | Rabbit polyclonal to ERK2 |
| Host species | Rabbit |
| Specificity | This antibody reacts with ERK 2 p42 and to a lesser extent ERK 1 p44. |
| Tested applications | Suitable for: IHC-FoFr, WB, IP, IHC-P |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | Synthetic peptide (Rat) (C terminal). |
| Positive control | HeLa, NIH/3T3, A-431 and HL-60 |

Properties

| | |
|-----------------------------|---|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C. Do Not Freeze. |
| Storage buffer | PBS with 0.1% sodium azide |
| Purity | IgG fraction |
| Clonality | Polyclonal |
| Isotype | IgG |

Applications

Our [Abpromise guarantee](#) covers the use of **ab7948** 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 |
|-------------|-----------|--|
| IHC-FoFr | | 1/300. ABC amplification recommended. |
| WB | ★★★★★ | Use at an assay dependent concentration. (see Abreview). |
| IP | | Use at an assay dependent concentration. |

| Application | Abreviews | Notes |
|-------------|-----------|--|
| IHC-P | | Use at an assay dependent concentration. |

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, 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.

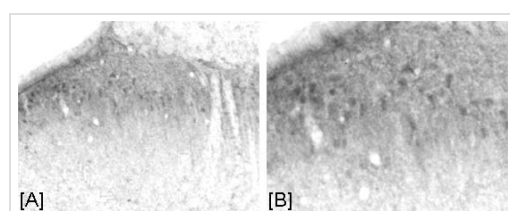
Post-translational modifications

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

Cellular localization

Nucleus.

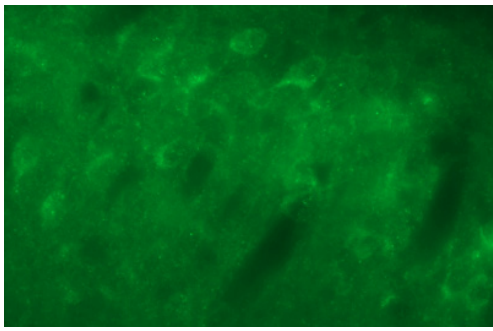
Images



Immunohistochemistry (PFA perfusion fixed frozen sections) - Anti-ERK2 antibody (ab7948)

Image courtesy of Dr S Pezet, CARD institute, KCL, London, UK

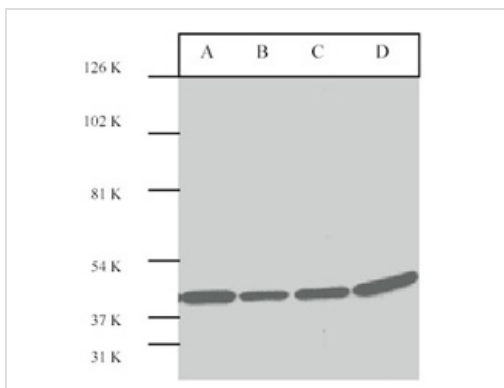
ERK-2 antibody ([ab7498](#)) at a dilution of 1/1000 (2 X o/n incubation at RT; ABC amplification). Nuclear staining observed in lamina layers 1 and 2 of the spinal cord [A] 40x objective, [B] 20x objective. IHC staining performed on PFA perfusion-fixed, free floating 30µm saggital spinal cord sections. Find detailed information regarding the protocol in the Specific Protocol link.



Immunocytochemistry/ Immunofluorescence - Anti-ERK2 antibody (ab7948)

Image courtesy of Dr S Pezet, CARD institute, KCL, London, UK

Immunofluorescence detection of ERK-2 antibody (ab7498) at a dilution of 1/300 (1 day incubation at RT). Cytoplasmic staining observed in the dorsal horn of the rat spinal cord (40x objective). Immunofluorescence staining performed on slide using PFA/picric acid perfusion-fixed tissue (30µm saggital spinal cord sections).



Western blot - Anti-ERK2 antibody (ab7948)

ab7948 staining ERK2 in A431 whole cell lysate (lane A), HeLa whole cell lysate (lane B), HL-60 whole cell lysate (lane C) and NIH / 3T3 whole cell lysate (lane D). ab7948 staining ERK2 in A431 whole cell lysate (lane A), HeLa whole cell lysate (lane B), HL-60 whole cell lysate (lane C) and NIH / 3T3 whole cell lysate (lane D).

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