

# ERK1/2 Monoclonal Antibody (5AD13MA), eFluor 570, eBioscience™

Product Details	
Size	100 µg
Species Reactivity	Human, Mouse, Rat
Host/Isotope	Mouse / IgG1, kappa
Recommended Isotype Control	Mouse IgG1 kappa Isotype Control (P3.6.2.8.1), eFluor 570, eBioscience™
Class	Monoclonal
Type	Antibody
Clone	5AD13MA
Conjugate	eFluor® 570
Form	Liquid
Concentration	0.2 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2, with 0.1% gelatin
Contains	0.09% sodium azide
Storage Conditions	4° C, store in dark, DO NOT FREEZE!
RRID	AB_2573620

Applications	Tested	Dilution	Published
Western Blot (WB)	-		1 Publication
Immunocytochemistry (ICC)	✓	5 µg/mL	
Immunofluorescence (IF)	✓	5 µg/mL	
Immunohistochemistry (Paraffin) (IHC (P))	✓	Assay-Dependent	

## Product Specific Information

Description: The 5AD13MA monoclonal antibody recognizes human, mouse, and rat extracellular signal-regulated kinases 1 and 2 (also known as ERK1/2, p44/42, or MAPK3/1). ERK1/2 belong to a family of conserved serine/threonine protein kinases known as mitogen-activated protein kinases (MAPKs) that are involved in many cellular programs such as proliferation, differentiation, motility, and survival. The ERK1/2 signaling pathway can be activated in response to a diverse range of extracellular stimuli including mitogens, growth factors, and cytokines. The primary activators of ERK1/2 are MEK1 and MEK2 which activate p44 and p42 through phosphorylation of activation loop residues Thr202/Tyr204 and Thr185/Tyr187 in ERK1 and ERK2, respectively. Several downstream targets of ERK1/2 have been identified, including p90RSK and the transcription factor Elk-1. ERK1/2 are negatively regulated by MAPK phosphatases as well as by chemical inhibitors of MEK including U0126 and PD98059. The ERK pathway is disrupted in many types of cancer and thus is an important target for diagnosis and treatment.

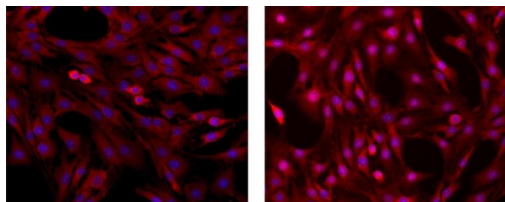
Applications Reported: This 5AD13MA antibody has been reported for use in immunohistochemical staining of formalin-fixed paraffin embedded tissue sections, microscopy, and immunocytochemistry.

Applications Tested: This 5AD13MA antibody has been tested by immunocytochemistry of methanol-fixed cells and can be used at less than or equal to 5 µg/mL. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

Filter Recommendation: When using this eFluor® 570 antibody conjugate, we recommend a filter that will capture the 570 emission wavelength (for example, Excitation 545/25, 565LP, Emission 605/70). A standard Alexa Fluor® 555 or TRITC filter is acceptable.

Excitation: 555 nm; Emission: 570 nm

## Product Images For ERK1/2 Monoclonal Antibody (5AD13MA), eFluor 570, eBioscience™



### ERK1/2 Antibody (41-9108-82) in ICC

Immunocytochemistry of fixed and permeabilized rat oligodendrogloma cells using 5 µg/mL of Anti-ERK1/2 eFluor® 570 (red). Cells were untreated (left) or treated with 50 ng/mL of PMA for 15 minutes (right). Nuclei are stained with Dapi (blue), colocalization appears pink.

## 1 Reference

### Western Blot (1)

#### Oncology letters

#### Butyrate upregulates the TLR4 expression and the phosphorylation of MAPKs and NK-B in colon cancer cell *in vitro*.

"Published figure using ERK1/2 monoclonal antibody (Product # 41-9108-82) in Western Blot"

Authors: Xiao T,Wu S,Yan C,Zhao C,Jin H,Yan N,Xu J,Wu Y,Li C,Shao Q,Xia S

**Species**  
Not Applicable

**Dilution**  
Not Cited

**Year**  
2018

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