

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

Product Details

Size	100 µg
Species Reactivity	Human, Mouse, Rat
Published Species	Mouse, Human
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	5AD13MA
Conjugate	Unconjugated
Form	Liquid
Concentration	0.5 mg/mL
Purification	Affinity chromatography
Storage buffer	PBS, pH 7.2
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_2572924

Applications	Tested Dilution	Publications
Western Blot (WB)	5 µg/mL	8 Publications
Immunohistochemistry (Paraffin) (IHC (P))	5 µg/mL	-
Immunocytochemistry (ICC/IF)	5 µg/mL	-

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 western blotting, immunohistochemical staining of formalin-fixed paraffin embedded tissue sections, microscopy, immunohistochemical staining, and immunocytochemistry.

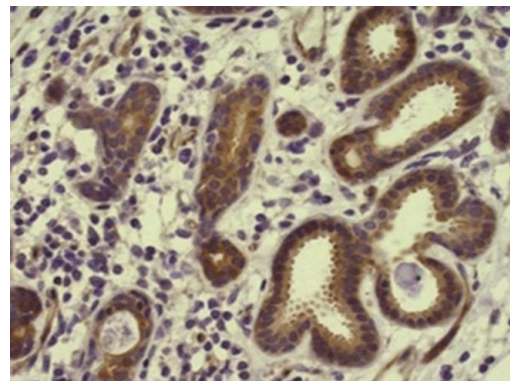
Applications Tested: This 5AD13MA antibody has been tested by western blot analysis of reduced cell lysate prepared from human cells, by immunohistochemistry on formalin-fixed paraffin embedded human tissue using low pH antigen retrieval, and by immunocytochemistry of MeOH-fixed cells. This antibody 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.

Purity: Greater than 90%, as determined by SDS-PAGE.

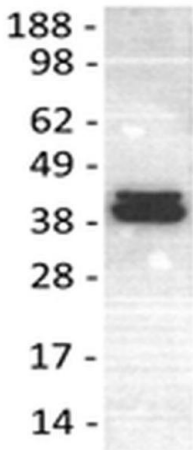
Aggregation: Less than 10%, as determined by HPLC.

Filtration: 0.2 µm post-manufacturing filtered.

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



ERK1/2 Antibody (14-9108-82) in IHC (P)
Immunohistochemistry of formalin-fixed paraffin embedded human breast cancer tissue stained with 5 µg/mL of Anti-ERK1/2 Purified followed by Anti-Mouse IgG Biotin, Avidin HRP, and DAB visualization. Nuclei are counterstained with hematoxylin.



ERK1/2 Antibody (14-9108-82) in WB
Immunoblotting of reduced Jurkat cell lysate with 5 µg/mL of Anti-ERK1/2 Purified. Bands were visualized using Anti-Mouse IgG HRP.

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Western Blot (8)

<p>Biomolecules & therapeutics</p> <p>4-F-PCP, a Novel PCP Analog Ameliorates the Depressive-Like Behavior of Chronic Social Defeat Stress Mice via NMDA Receptor Antagonism.</p> <p>"14-9108-82 was used in Western Blotting to provide significant implications for future research not only with PCP analogs but also on the next generation of different types of antidepressants."</p> <p>Authors: Ortiz DMD, Kim M, Lee HJ, Botanas CJ, Custodio RJP, Sayson LV, Campomayor NB, Lee C, Lee YS, Cheong JH, Kim HJ</p>	<p>Year 2023</p> <p>Species Mouse</p>
<p>Nature communications</p> <p>Caveolin-1 temporal modulation enhances antibody drug efficacy in heterogeneous gastric cancer.</p> <p>"Published figure using ERK1/2 monoclonal antibody (Product # 14-9108-82) in Western Blot"</p> <p>Authors: Pereira PMR, Mandleywala K, Monette S, Lumish M, Tully KM, Panikar SS, Cornejo M, Mauguen A, Ragupathi A, Keltee NC, Mattar M, Janjigian YY, Lewis JS</p>	<p>Year 2022</p>

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