

Phospho-ERK1/ERK2 (Thr185, Tyr187) Polyclonal Antibody

Product Details	
Size	100 µL
Species Reactivity	Bovine, C. elegans, Chicken, Fruit fly, Human, Mouse, Rat, Xenopus
Published Species	Rat, C. elegans, Mouse, Human, Xenopus
Host/Isotope	Rabbit / IgG
Class	Polyclonal
Type	Antibody
Conjugate	Unconjugated
Immunogen	The antiserum was produced against a chemically synthesized phosphopeptide derived from the region of human ERK1 and 2 that contains threonine 202/185 and tyrosine 204/187. This region is conserved among many species including rat, mouse, cow, frog, snail, nematode, and fruit fly.
Form	Liquid
Purification	Antigen affinity chromatography
Storage buffer	Dulbecco's PBS, pH 7.3, with 50% glycerol, 1mg/mL BSA
Contains	0.05% sodium azide
Storage Conditions	-20°C
RRID	AB_2533719

Applications	Tested Dilution	Publications
Immunohistochemistry (Paraffin) (IHC (P))	1:10-1:100	2 Publications
Western Blot (WB)	1:1000	38 Publications
Immunocytochemistry (ICC)	-	4 Publications
Immunofluorescence (IF)	-	4 Publications
Immunohistochemistry (IHC)	-	2 Publications
Immunohistochemistry - Free Floating (IHC (Free))	-	1 Publication
Miscellaneous PubMed (Misc)	-	7 Publications

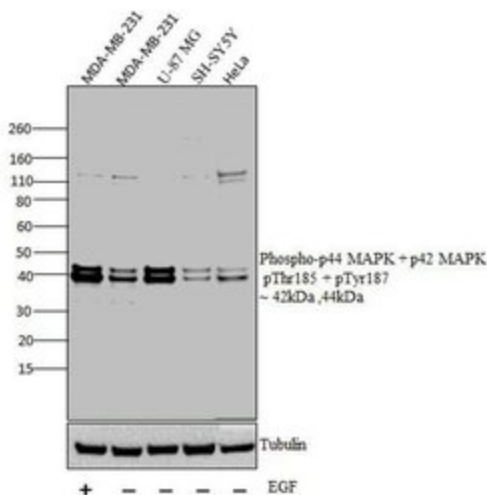
Product Specific Information

Purified from rabbit serum by sequential epitope-specific chromatography, this product contains enough material for 10 mini-blots. The antibody has been negatively preadsorbed using a non-phosphopeptide corresponding to the sites of phosphorylation to remove antibody that is reactive with non-phosphorylated ERK1 and 2. The final product is generated by affinity chromatography using an ERK1 and 2-derived peptide that is phosphorylated at threonine 202/185 and tyrosine 204/187, respectively, within the activation loop.

This antibody has been used in western blotting and previous lots have been used in immunostaining. Other applications may work but have not been tested. The positive control used in western analysis were PC12 cells +/- Sorbitol; NIH3T3 +/- PDGF; and HEK293 +/- UV.

Phospho-ERK1/ERK2 (Thr185, Tyr187) Antibody (44-680G)

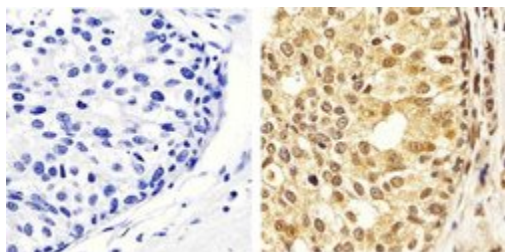
Altered expression of proteins upon cell treatment demonstrates antibody specificity. Western blot of Phospho-ERK1/ERK2 (Thr185, Tyr187) using Anti - ERK1/2 [pTpY185/187]Rabbit polyclonal Antibody (Product # 44-680G), shows increase in expression of Phospho-ERK1/ERK2 (Thr185, Tyr187) upon treatment with EGF in MDA-MB-231 cells. Cell treatment validation info.



Product Images For Phospho-ERK1/ERK2 (Thr185, Tyr187) Polyclonal Antibody

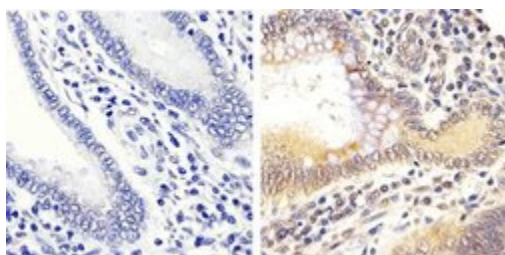
Phospho-ERK1/ERK2 (Thr185, Tyr187) Antibody (44-680G) in IHC (P)

Immunohistochemistry analysis of ERK1/2 (pTpY185/187) showing staining in the cytoplasm and nucleus of paraffin-embedded human breast carcinoma tissue (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 (pTpY185/187) polyclonal antibody (Product # 44-680G) 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.



Phospho-ERK1/ERK2 (Thr185, Tyr187) Antibody (44-680G) in IHC (P)

Immunohistochemistry analysis of ERK1/2 (pTpY185/187) showing staining in the cytoplasm and nucleus of paraffin-embedded human colon carcinoma tissue (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 (pTpY185/187) polyclonal antibody (Product # 44-680G) 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.



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Western Blot (38)

Frontiers in pharmacology

Repeated Sigma-1 Receptor Antagonist MR309 Administration Modulates Central Neuropathic Pain Development After Spinal Cord Injury in Mice.

"44-680G was used in Western Blotting to evaluate MR309 modulation on both thermal hyperalgesia and mechanical allodynia development after spinal cord injury in mice."

Authors: Castany S,Codony X,Zamanillo D,Merlos M,Verdú E,Boadas-Vaello P

Species
Mouse

Dilution
1:800

Year
2020

PloS one

CRB3 and the FERM protein EPB41L4B regulate proliferation of mammary epithelial cells through the release of amphiregulin.

"Published figure using Phospho-ERK1/ERK2 (Thr185, Tyr187) polyclonal antibody (Product # 44-680G) in Western Blot"

Authors: Walker SJ,Selfors LM,Margolis BL,Brugge JS

Species
Human

Dilution
1:1,000

Year
2019

[View more WB references on thermofisher.com](#)

Immunocytochemistry (4)

Cellular physiology and biochemistry : international journal of experimental cellular physiology, biochemistry, and pharmacology

Involvement of the EGF Receptor in MAPK Signaling Activation by a 50 Hz Magnetic Field in Human Neuroblastoma Cells.

"44-680G was used in Immunocytochemistry-immunofluorescence to determine the role of the epidermal growth factor receptor in the field induced cell proliferation and activation of MAPK pathways."

Authors: Martínez MA,Úbeda A,Trillo MÁ

Species
Human

Dilution
1:100

Year
2019

International journal of molecular sciences

Power Frequency Magnetic Fields Affect the p38 MAPK-Mediated Regulation of NB69 Cell Proliferation Implication of Free Radicals.

"44-680G was used in Immunocytochemistry to investigate the effect of magnetic fields on the p38 MAPK-mediated regulation of NB69 cell proliferation and the potential involvement of free radicals."

Authors: Martínez MA,Úbeda A,Moreno J,Trillo MÁ

Species
Human

Dilution
1:100

Year
2016

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More applications with references on thermofisher.com

- IF (4)
- Misc (7)
- IHC (P) (2)
- IHC (2)
- IHC (Free) (1)

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