

Phospho-ERK1/ERK2 (Tyr204) Monoclonal Antibody (B.742.5)

Product Details	
Size	200 µL
Species Reactivity	Non-human primate, Pig, Rat, Zebrafish, Fruit fly, Human, Mink, Mouse
Host/Isotope	Rabbit / IgG
Class	Monoclonal
Type	Antibody
Clone	B.742.5
Conjugate	Unconjugated
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding pThr202/Tyr204 of human p44 MAP kinase
Form	Liquid
Purification	Affinity chromatography
Storage buffer	0.01M HEPES, pH 7.5, with 0.15M NaCl, 100µg/mL BSA, 50% glycerol
Contains	<0.02% sodium azide
Storage Conditions	-20°C
RRID	AB_10980347

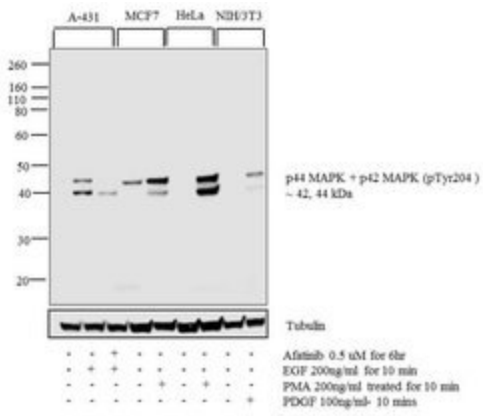
Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1:200	-
Immunocytochemistry (ICC)	1:200	-
Immunofluorescence (IF)	1:200	-
Western Blot (WB)	1:1000	1 Publication

Product Specific Information

It is not recommended to aliquot this antibody.

This antibody is not cross-reactive with the corresponding phosphorylated residues of either JNK/SAPK or p38 MAP kinase.

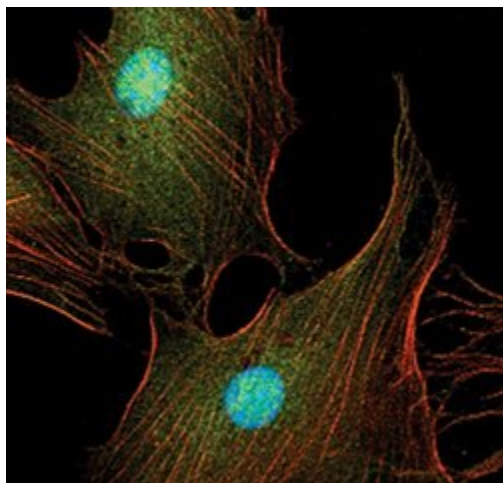
Advanced Verification Data



Phospho-ERK1/ERK2 (Tyr204) Antibody (MA5-15174)

Altered expression of target protein upon TM demonstrates antibody specificity. Western blot analysis of Phospho-ERK1/ERK2 (Tyr204) using Anti-Phospho-ERK1/ERK2 (Tyr204) Monoclonal Antibody (Product # MA5-15174) shows increased expression of proteins phosphorylated at the tyrosine residues in A-431, MCF7, HeLa and NIH3T3 cell lines upon EGF, PMA and PDGF treatments. Pre-treatment with antagonist, Afatinib resulted in inhibition of ERK1/ERK2 (Tyr204) phosphorylation upon EGF treatment. Cell treatment validation info.

Product Images For Phospho-ERK1/ERK2 (Tyr204) Monoclonal Antibody (B.742.5)

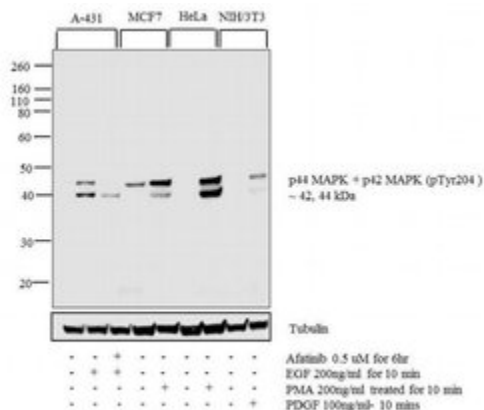


Phospho-ERK1/ERK2 (Tyr204) Antibody (MA5-15174) in IF

Immunofluorescent analysis of Phospho-p44/42 MAPK/Erk1/2 pThr202/Tyr204 in NIH/3T3 cells stimulated with Platelet-Derived Growth Factor, using a Phospho-p44/42 MAPK/Erk1/2 pThr202/Tyr204 monoclonal antibody (Product # MA5-15174) (green). Actin filaments are labeled with a fluorescent red phalloidin. DNA is labeled using a fluorescent blue dye.

Phospho-ERK1/ERK2 (Tyr204) Antibody (MA5-15174) in WB

WB analysis was performed on whole cell extracts (30 µg) of A-431 (1), A-431 treated with EGF (200 ng/mL for 10 minutes) (2), A-431 treated with Afatinib followed by EGF (0.5µM of Afatinib for 6hrs, 200 ng/mL for 10 minutes) (3), MCF7 (4) and MCF7 treated with PMA (200 ng/mL for 10 minutes) (5), HeLa (6) and HeLa treated with PMA (200 ng/mL for 10 minutes) (7), NIH/3T3 (8) and NIH/3T3 treated with PMA (200 ng/mL for 10 minutes) (9). The blot was probed with Phospho-ERK1/ERK2 (Tyr204) Rabbit Monoclonal Antibody (Product # MA5-15174, 1:1000 dilution) and detected by chemiluminescence using Goat anti-Rabbit IgG (H+L) Superclonal Secondary Antibody, HRP (Product # A27036, 0.25 µg/mL, 1:4000 dilution). 44, 42 kDa band corresponding to Phospho-ERK1/ERK2 (Tyr204) was detected and increased upon EGF and PMA treatment across cell lines and pre-treatment with Afatinib (antagonist) resulted in inhibition of Phospho-ERK1/ERK2 (Tyr204) in A-431 cell line upon EGF treatment. Protein samples were electrophoresed using Novex NuPAGE 4-12 % Bis-Tris gel (Product # NP0321BOX), XCell SureLock System (Product # EI0002) and Novex Sharp Pre-Stained Protein Standard (Product # LC5800). Resolved proteins were then wet transferred onto a nitrocellulose membrane. The membrane was probed with the relevant primary and secondary Antibody following blocking with 5 % skimmed milk. Chemiluminescent detection was performed using Pierce™ ECL Western Blotting Substrate (Product # 32106).



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Western Blot (1)

F1000Research

Validation of commercial ERK antibodies against the ERK orthologue of the scleractinian coral *Stylophora pistillata*.

"Published figure using Phospho-ERK1/ERK2 (Tyr204) monoclonal antibody (Product # MA5-15174) in Western Blot"

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Species
Not Applicable

Dilution
Not Cited

Year
2019

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