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Phospho-ERK1-T202/Y204 + ERK2-T185/Y187 Rabbit mAb

Catalog No.: AP1639 Recombinant

Basic Information

Observed MW
42 kDa/44 kDa

Calculated MW
36-43 kDa

Category
Primary antibody

Applications
WB,IP,IF/ICC,IHC-P,ELISA

Cross-Reactivity
Human, Mouse, Rat

CloneNo number
ARC3955

Background

The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets. Alternatively spliced transcript variants encoding different protein isoforms have been described.

Recommended Dilutions

WB	1:1000 - 1:5000
IP	0.5 μg - 4 μg antibody for 200 μg - 400 μg extracts of whole cells
IF/ICC	1:200 - 1:800
IHC-P	1:200 - 1:800
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions (≥1:10000)，a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID
5595/5594

Swiss Prot
P27361/P28482

Immunogen
This information is considered to be commercially sensitive.

Synonyms
ERK-1; ERK1; ERT2; HS44KDAP; HUMKER1A; P44ERK1; P44MAPKERK; p42-MAPK PRKM3; p44-ERK1; p44-MAPK; ERK; ERK-2; ERK2; ERT1; MAPK2; NS13; P42MAPK; PRKM1; PRKM2; p38; p40; p41; p41mapk; p42-MAPK

Product Information

Source
Rabbit

Isotype
IgG

Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.09% Sodium azide,0.05% BSA,50% glycerol,pH7.3.

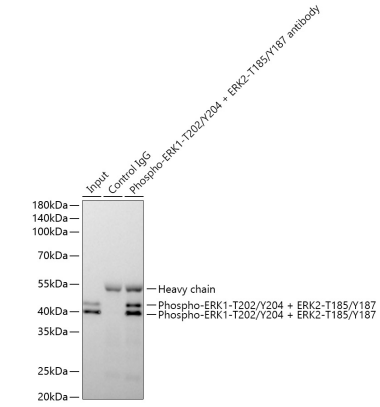
Contact

400-999-6126

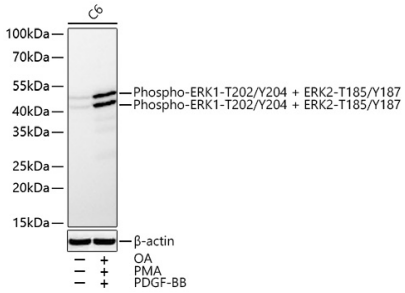
cn.market@abclonal.com.cn

www.abclonal.com.cn

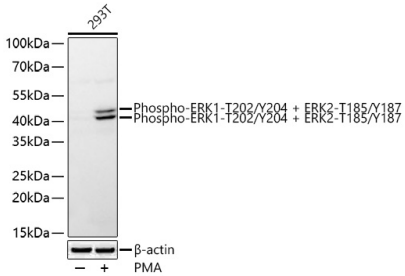
Validation Data



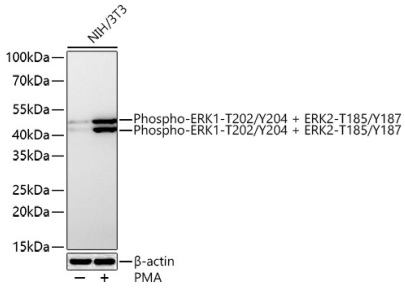
Immunoprecipitation of Phospho-ERK1-T202/Y204 + ERK2-T185/Y187 from 300 µg extracts of NIH/3T3 cells treated with PMA (200 nM, 30 min) was performed using 2 µg of Phospho-ERK1-T202/Y204 + ERK2-T185/Y187 Rabbit mAb (AP1639). Rabbit Control IgG (AC005) was used to precipitate the Control IgG sample. IP samples were eluted with 1x Laemmli Buffer. The Input lane represents 10% of the total input. Western blot analysis of immunoprecipitates was conducted using Phospho-ERK1-T202/Y204 + ERK2-T185/Y187 Rabbit mAb (AP1639) at a dilution of 1:2000.



Western blot analysis of various lysates using Phospho-ERK1-T202/Y204 + ERK2-T185/Y187 Rabbit mAb (AP1639) at 1:2000 dilution incubated overnight at 4℃. C6 cells were treated with OA (1 µM) at 37℃ for 50 minutes, PMA (200 nM) at 37℃ for 30 minutes and PDGF-BB (100 ng/mL) at 37℃ for 30 minutes after serum starvation overnight.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 3 s.

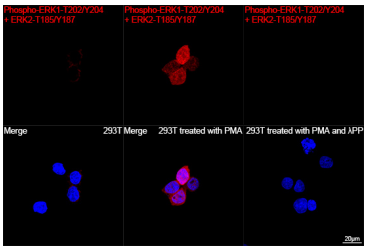


Western blot analysis of lysates from 293T cells using Phospho-ERK1-T202/Y204 + ERK2-T185/Y187 Rabbit mAb (AP1639) at 1:2000 dilution incubated overnight at 4℃. 293T cells were treated with PMA (200 nM) at 37℃ for 30 minutes.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 60 s.

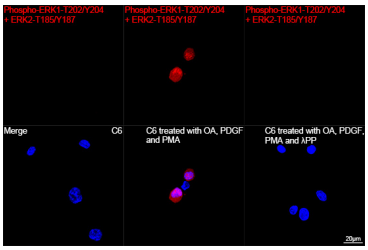


Western blot analysis of lysates from NIH/3T3 cells using Phospho-ERK1-T202/Y204 + ERK2-T185/Y187 Rabbit mAb (AP1639) at 1:2000 dilution incubated overnight at 4℃. NIH/3T3 cells were treated with PMA (200 nM) at 37℃ for 30 minutes after serum starvation overnight.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 30 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 90 s.

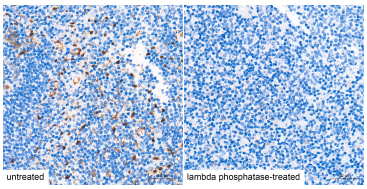
Validation Data



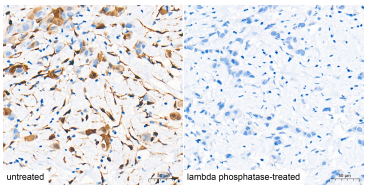
Confocal imaging of 293T cells treated with PMA, 293T cells treated with PMA and λPP, and untreated 293T cells using Phospho-ERK1-T202/Y204 + ERK2-T185/Y187 Rabbit mAb (AP1639, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



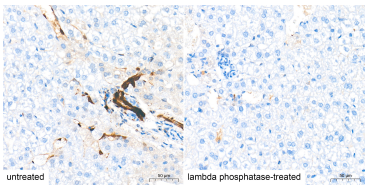
Confocal imaging of C6 cells treated with OA, PDGF and PMA, C6 cells treated with OA, PDGF, PMA and λPP, and untreated C6 cells using Phospho-ERK1-T202/Y204 + ERK2-T185/Y187 Rabbit mAb (AP1639, dilution 1:200) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Objective: 100x.



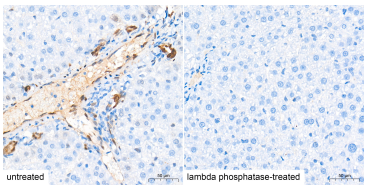
Immunohistochemistry analysis of paraffin-embedded Human tonsil tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-ERK1-T202/Y204 + ERK2-T185/Y187 Rabbit mAb (AP1639) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Human breast cancer tissue, untreated (left) and lambda phosphatase-treated (right), using Phospho-ERK1-T202/Y204 + ERK2-T185/Y187 Rabbit mAb (AP1639) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse liver, untreated (left) and lambda phosphatase-treated (right), using Phospho-ERK1-T202/Y204 + ERK2-T185/Y187 Rabbit mAb (AP1639) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Rat liver, untreated (left) and lambda phosphatase-treated (right), using Phospho-ERK1-T202/Y204 + ERK2-T185/Y187 Rabbit mAb (AP1639) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.