abcam

Product datasheet

Anti-ERK1 (phospho T202) + ERK2 (phospho T185) antibody [EPR19401] ab201015

Recombinant RabMAb

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Overview

Product name	Anti-ERK1 (phospho T202) + ERK2 (phospho T185) antibody [EPR19401]
Description	Rabbit monoclonal [EPR19401] to ERK1 (phospho T202) + ERK2 (phospho T185)
Host species	Rabbit
Tested applications	**Suitable for:** ICC/IF, IP, IHC-P, WB, Dot blot
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Jurkat, treated with 200 ng/ml PMA for 30 minutes whole cell lysate; NIH/3T3, untreated and treated with 50 ng/ml PDGF for 40 minutes whole cell lysates; PC-12, untreated and treated with 200 ng/ml NGF for 4 days whole cell lysates. IHC-P: Human breast and glioma tissues. IP: NIH/3T3 treated with 50ng/ml PDGF for 40min whole cell lysate; PC-12 treated with 100ng/ml NGF for 10min whole cell lysate. ICC/IF:Jurkat
General notes	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 0.05% BSA, 40% Glycerol
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR19401
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab201015 in the following tested applications.

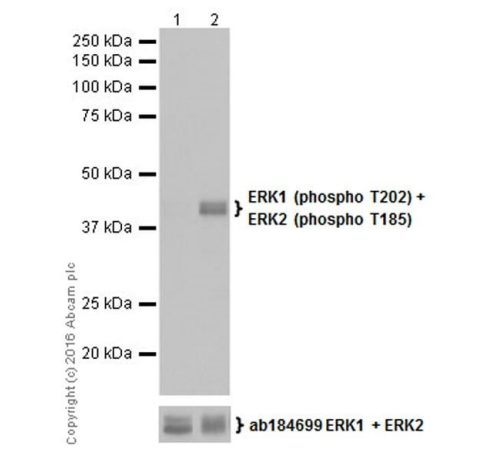
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
ICC/IF	★★★★☆ (3)	Use at an assay dependent concentration.
IP		1/30.
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. IHC is recommended for human only.
WB	★★★★★ (1)	1/1000. Detects a band of approximately 44, 42 kDa (predicted molecular weight: 41 kDa).
Dot blot		1/1000.

Target

Cellular localization ERK2: Nucleus.

Images



Western blot - Anti-ERK1 (phospho T202) + ERK2 (phospho T185) antibody [EPR19401] (ab201015)

All lanes : Anti-ERK1 (phospho T202) + ERK2 (phospho T185) antibody [EPR19401] (ab201015) at 1/1000 dilution

Lane 1 : Untreated Jurkat (Human T cell leukemia cell line from peripheral blood) whole cell lysate

Lane 2 : Jurkat (Human T cell leukemia cell line from peripheral blood) treated with 200 ng/ml PMA for 30 minutes whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

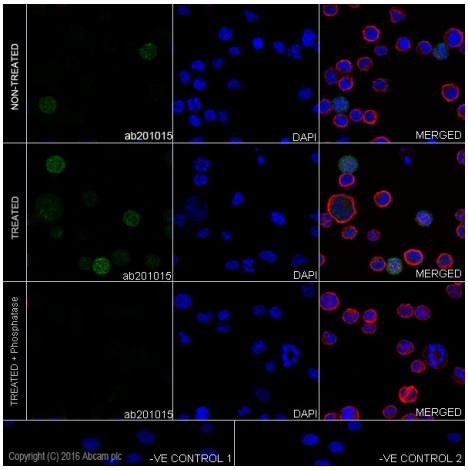
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 41 kDa

Observed band size: 42,44 kDa

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Immunocytochemistry/ Immunofluorescence - Anti-ERK1 (phospho T202) + ERK2 (phospho T185) antibody [EPR19401] (ab201015)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Jurkat (Human T cell leukemia cell line from peripheral blood) cells labeling ERK1 (phospho T202) and ERK2 (phospho T185)

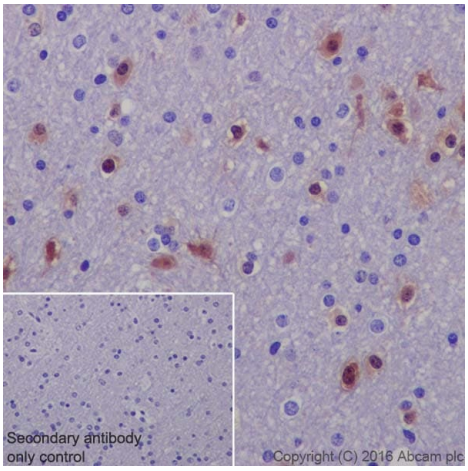
ERK1 (phospho T202) + ERK2 (phospho T185) with ab201015 at 1/500 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green).

Confocal image showing staining on M phase cells (PMID:26529125). After PMA treatment (200 ng/ml, 30min), the staining was increased, and LP treatment decreased the PMA induced staining.

The nuclear counter stain is DAPI (blue).

Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (Alexa Fluor® 594 Goat anti-Mouse secondary) at 1/1000 dilution (red).

The negative controls are as follows:
-ve control 1: ab201015 at 1/500 dilution followed by **ab150120** (Alexa Fluor® 594 Goat anti-Mouse secondary) at 1/1000 dilution.
-ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor® 488 Goat Anti-Rabbit IgG H&L) at 1/1000 dilution.

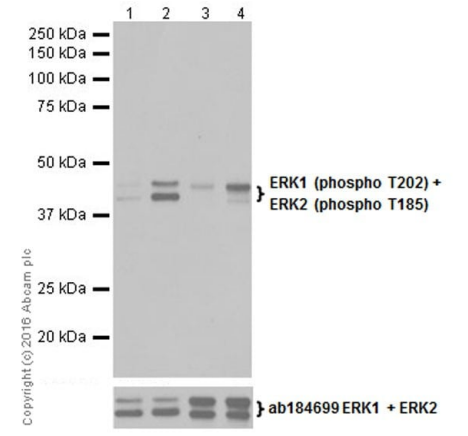


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ERK1 (phospho T202) + ERK2 (phospho T185) antibody [EPR19401] (ab201015)

Immunohistochemical analysis of paraffin-embedded Human glioma tissue labeling ERK2 (phospho T185) with ab201015 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nuclear with weak cytoplasm staining on Human glioma is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab97051** at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Western blot - Anti-ERK1 (phospho T202) + ERK2 (phospho T185) antibody [EPR19401] (ab201015)

All lanes : Anti-ERK1 (phospho T202) + ERK2 (phospho T185) antibody [EPR19401] (ab201015) at 1/1000 dilution

Lane 1 : Untreated NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate
Lane 2 : NIH/3T3 (Mouse embryonic fibroblast cell line) treated with 50 ng/ml PDGF for 40 minutes whole cell lysate
Lane 3 : Untreated PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate
Lane 4 : PC-12 (Rat adrenal gland pheochromocytoma cell line) treated with 200 ng/ml NGF for 4 days whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

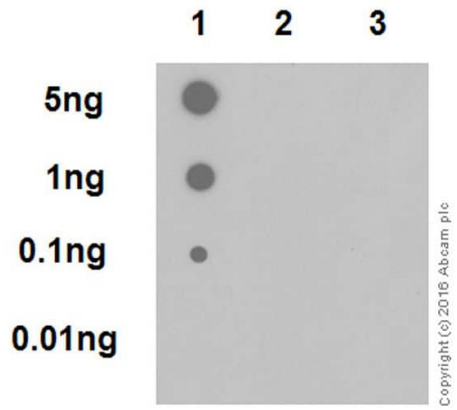
Predicted band size: 41 kDa
Observed band size: 42,44 kDa

Exposure time: 10 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The induction conditions refer to PMID:12454035; PMID:17026715;

PMID:22206868.



Dot Blot - Anti-ERK1 (phospho T202) + ERK2 (phospho T185) antibody [EPR19401] (ab201015)

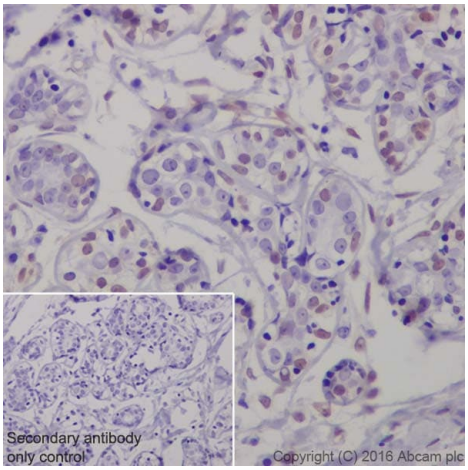
Dot blot analysis of ERK2 (phospho T185) labeled with ab201015 at 1/1000 dilution.

Lane 1: ERK2 (pT185) phospho peptide: DHTGFLT(p)EYVATR aa179-191 peptide.
Lane 2: ERK2 Non-phospho peptide: DHTGFLTEYVATR aa179-191 peptide.
Lane 3: ERK2 (pY187) phospho peptide: DHTGFLTEY(p)VATR aa179-191 peptide.

Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated (**ab97051**) at 1/100000 dilution was used as secondary antibody.

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: 3 minutes.

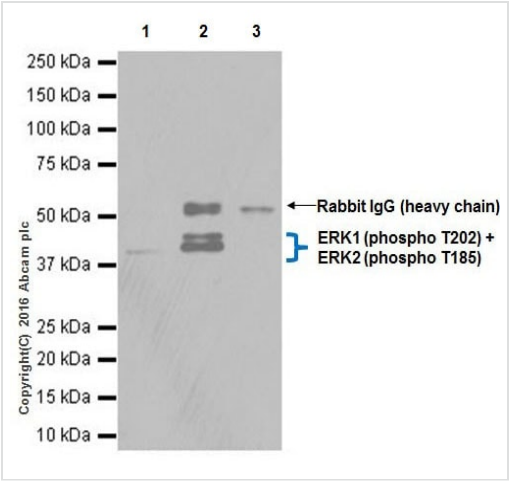


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ERK1 (phospho T202) + ERK2 (phospho T185) antibody [EPR19401] (ab201015)

Immunohistochemical analysis of paraffin-embedded Human breast tissue labeling ERK2 (phospho T185) with ab201015 at 1/100 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nuclear staining on Human breast is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is **ab97051** at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunoprecipitation - Anti-ERK1 (phospho T202) + ERK2 (phospho T185) antibody [EPR19401] (ab201015)

ERK2 (phospho T185) was immunoprecipitated from 0.35 mg of NIH/3T3 (Mouse embryonic fibroblast cell line) treated with 50ng/ml PDGF for 40min whole cell lysate with ab201015 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab201015 at 1/1000 dilution. VeriBlot for IP Detection Reaction (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

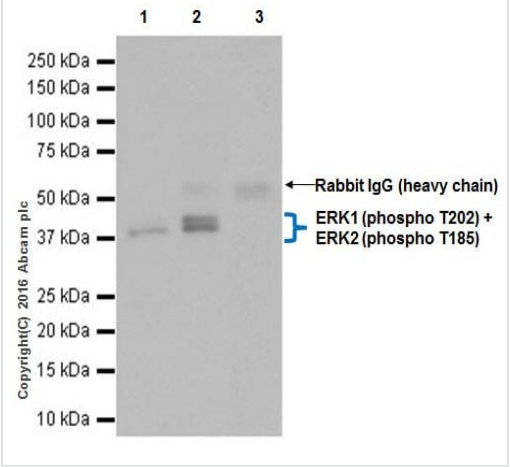
Lane 1: NIH/3T3 treated with 50ng/ml PDGF for 40min whole cell lysate, 10µg (Input).

Lane 2: ab201015 IP in NIH/3T3 treated with 50ng/ml PDGF for 40min whole cell lysate.

Lane 3: Rabbit IgG,monoclonal [EPR25A]-Isotype Control (**ab172730**) instead of ab201015 in NIH/3T3 treated with 50ng/ml PDGF for 40min whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 minutes.



Immunoprecipitation - Anti-ERK1 (phospho T202) + ERK2 (phospho T185) antibody [EPR19401] (ab201015)

ERK2 (phospho T185) was immunoprecipitated from 0.35 mg of PC-12 (Rat adrenal gland pheochromocytoma cell line) treated with 100ng/ml NGF for 10min whole cell lysate with ab201015 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab201015 at 1/1000 dilution. VeriBlot for IP Detection Reaction (HRP) (**ab131366**), was used for detection at 1/1000 dilution.

Lane 1: PC-12 treated with 100ng/ml NGF for 10min whole cell lysate, 10µg (Input).

Lane 2: ab201015 IP in PC-12 treated with 100ng/ml NGF for 10min whole cell lysate.

Lane 3: Rabbit IgG,monoclonal [EPR25A]-Isotype Control (**ab172730**) instead of ab201015 in PC-12 treated with 100ng/ml NGF for 10min whole cell lysate

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 3 minutes.

Anti-ERK1 (phospho T202) + ERK2 (phospho T185) antibody [EPR19401] (ab201015)

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