abcam

ab32537

Anti-ERK1 antibody [Y72]

Lab Essentials | Recombinant | RabMAb | KO Validated | 20ul selling size

Key facts

Isotype	IgG
Host species	Rabbit
Storage buffer	pH: 7.2 - 7.4 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Form	Liquid
Clonality	Monoclonal
Immunogen	The exact immunogen used to generate this antibody is proprietary information.
Clone number	Y72
Purification technique	Affinity purification Protein A
Specificity	This antibody recognises ERK1.The antibody does not cross-react with other MAP kinases.
Epitope	ab32537 reacts with an epitope located in the N terminal region of ERK1.
Concentration	0.338 mg/mL The concentration of this product may be batch-dependent Batch concentration finder →

Reactivity data

IHC-P

Tested

Species	Human

Dilution info	2 µg/mL
Notes	Perform heat-mediated antigen retrieval before commencing with IHC staining protocol.

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Synthetic peptide - Human
Dilution info	-
Notes	-

IP

Tested

Species	Human
Dilution info	1/20 - 1/40
Notes	-

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Synthetic peptide - Human
Dilution info	-
Notes	-

WB

Tested

Species	Synthetic peptide - Human
Dilution info	1/1000
Notes	-

Species	Mouse
Dilution info	1/1000
Notes	Can be blocked with ab204281.

Species	Human
Dilution info	1/1000
Notes	-

ICC/IF

Tested

Species	Human
Dilution info	1/400
Notes	This product gave a positive signal in HAP1 cells fixed with 4% formaldehyde (10 min) and 100% methanol (5 min).

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Synthetic peptide - Human
Dilution info	-
Notes	-

Flow Cyt (Intra)

Tested

Species	Human
Dilution info	1/30 - 1/40
Notes	ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

Expected

Species	Mouse
Dilution info	Use at an assay dependent concentration.
Notes	-

Not recommended

Species	Synthetic peptide - Human
Dilution info	-
Notes	-

Target data

See full target information MAPK3

Function

Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway (PubMed:34497368). MAPK1/ERK2 and MAPK3/ERK1 are the 2 MAPKs which play an important role in the MAPK/ERK cascade. They participate also in a signaling cascade initiated by activated KIT and KITLG/SCF. Depending on the cellular context, the MAPK/ERK cascade mediates diverse biological functions such as cell growth, adhesion, survival and differentiation through the regulation of transcription, translation, cytoskeletal rearrangements. The MAPK/ERK cascade also plays a role in initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors. About 160 substrates have already been discovered for ERKs. Many of these substrates are localized in the nucleus, and seem to participate in the regulation of transcription upon stimulation. However, other substrates are found in the cytosol as well as in other cellular organelles, and those are responsible for processes such as translation, mitosis and apoptosis. Moreover, the MAPK/ERK cascade is also involved in the regulation of the endosomal dynamics, including lysosome processing and endosome cycling through the perinuclear recycling compartment (PNRC); as well as in the fragmentation of the Golgi apparatus during mitosis. The substrates include

transcription factors (such as ATF2, BCL6, ELK1, ERF, FOS, HSF4 or SPZ1), cytoskeletal elements (such as CANX, CTTN, GJA1, MAP2, MAPT, PXN, SORBS3 or STMN1), regulators of apoptosis (such as BAD, BTG2, CASP9, DAPK1, IER3, MCL1 or PPARG), regulators of translation (such as EIF4EBP1) and a variety of other signaling-related molecules (like ARHGEF2, DEPTOR, FRS2 or GRB10) (PubMed:35216969). Protein kinases (such as RAF1, RPS6KA1/RSK1, RPS6KA3/RSK2, RPS6KA2/RSK3, RPS6KA6/RSK4, SYK, MKNK1/MNK1, MKNK2/MNK2, RPS6KA5/MSK1, RPS6KA4/MSK2, MAPKAPK3 or MAPKAPK5) and phosphatases (such as DUSP1, DUSP4, DUSP6 or DUSP16) are other substrates which enable the propagation the MAPK/ERK signal to additional cytosolic and nuclear targets, thereby extending the specificity of the cascade. Phosphorylates GJA1 at 'Ser-279' and 'Ser-282' resulting in an increase in GJA1 ubiquitination and ultimately lysosomal degradation (By similarity).

Storage

Shipped at conditions	Conditional Ambient
Appropriate short-term storage duration	1-2 weeks
Appropriate short-term storage conditions	+4°C
Appropriate long-term storage conditions	-20°C
Aliquoting information	Upon delivery aliquot
Storage information	Avoid freeze / thaw cycle

Notes

Patented technology
Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb® patents.

What are the advantages of a recombinant monoclonal antibody?
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 batch production

For more information, read more on recombinant antibodies.

Species reactivity
Rat: We have preliminary internal testing data to indicate this antibody may not react with this species.
Please contact us for more information.

Supplementary info

This supplementary information is collated from multiple sources and compiled automatically.

Activity summary	ERK1 also known as MAPK3 is an extracellular signal-regulated kinase involved in transmitting signals from the cell surface to the nucleus. This protein has a molecular mass of about 44 kDa. ERK1 expresses in various tissue types with higher expression in the brain heart and skeletal muscle. Researchers often study ERK1 in the context of its role in cellular signaling due to its involvement in critical regulatory functions.
Biological function summary	ERK1 plays a significant role in cell cycle regulation differentiation and proliferation. It forms part of the MAPK signaling cascade becoming activated through a phosphorylation event. In its activated form ERK1 translocates to the nucleus where it phosphorylates target substrates. ERK1 often functions in conjunction with its homolog ERK2 to mediate these cellular processes marking it as an essential player in growth factor signaling.
Pathways	ERK1 functions primarily within the MAPK/ERK signaling pathway a major conduit for transmitting proliferative signals from growth factor receptors. ERK1 interacts with proteins like MEK1/2 which phosphorylate and activate ERK1 in response to extracellular stimuli. Another critical pathway involving ERK1 is the Ras-Raf-MEK-ERK cascade which regulates various cellular outcomes. This connection to the Ras family highlights its importance in signal transduction and reinforces its position in critical cellular processes.
Associated diseases and disorders	Aberrant activation of ERK1 connects to diseases such as cancer and cardiovascular disorders. In cancer the dysregulation of the MAPK/ERK pathway often through mutations affecting Ras or Raf proteins leads to uncontrolled cell proliferation. ERK1's involvement in cardiovascular diseases links to its role in hypertrophic signaling in cardiac cells where altered ERK1 activity can contribute to pathological cardiac remodeling. Understanding these interactions can aid in developing therapeutic strategies targeting the MAPK/ERK signaling pathway.

Product promise

Tested

We have tested this species and application combination and it works. It is covered by our product promise.

Expected

We have not tested this specific species and application combination in-house, but expect it will work. It is covered by our product promise.

Predicted

This species and application combination has not been tested, but we predict it will work based on strong homology. However, this combination is not covered by our product promise.

Not recommended

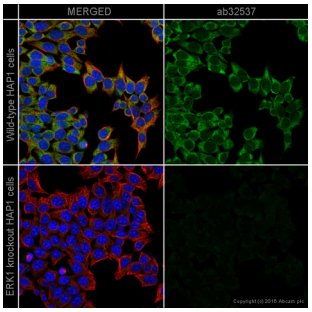
We do not recommend this combination. It is not covered by our product promise.

We are dedicated to supporting your work with high quality reagents and we are here for you every step of the way should you need us.

In the unlikely event of one of our products not working as expected, you are covered by our product promise.

Full details and terms and conditions can be found here:
Terms & Conditions.

19 product images

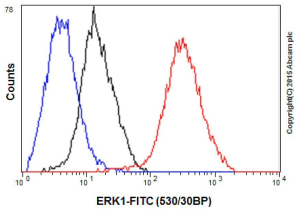


Immunocytochemistry/ Immunofluorescence - Anti-ERK1 antibody [Y72] (ab32537)

ERK1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-ERK1 antibody

ab32537 staining ERK1 in wild-type HAP1 cells (top panel) and ERK1 knockout HAP1 cells (bottom panel). The cells were fixed with 100% methanol (5min), permeabilized with 0.1% Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated with ab32537 at 1/400 dilution and ab7291 at 1ug/ml concentration overnight at +4°C, followed by a further incubation at room temperature for 1h with a goat secondary antibody to Rabbit IgG (Alexa Fluor® 488) (ab150081) at 2 µg/ml (shown in green) and a goat secondary antibody to Mouse IgG (Alexa Fluor® 594) (ab150117) at 2ug/ml (shown in pseudo-color red). Nuclear DNA was labelled in blue with DAPI.
This product also gave a positive signal under the same testing conditions in HAP1 cells fixed with 4% formaldehyde (10 min).

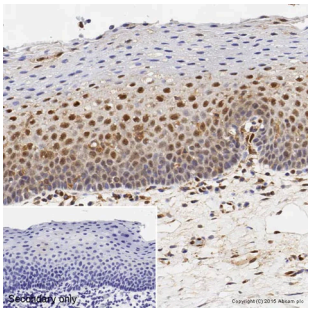
Image was taken with a confocal microscope (Leica-Microsystems, TCS SP8).



Flow Cytometry (Intracellular) - Anti-ERK1 antibody [Y72] (ab32537)

ERK1 Flow Cytometry (Intracellular) staining using rabbit Anti-ERK1 antibody

Intracellular Flow Cytometry analysis ofJurkat cells labelling ERK1 with purified ab32537 at a dilution of 1/30 (red). Cells were fixed with 4% paraformaldehyde. A FITC-conjugated goat anti-rabbit IgG (1/150) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.

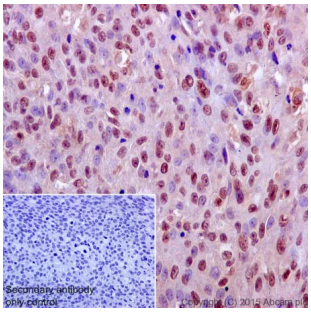


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ERK1 antibody [Y72] (ab32537)

ERK1 Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) staining using rabbit Anti-ERK1 antibody

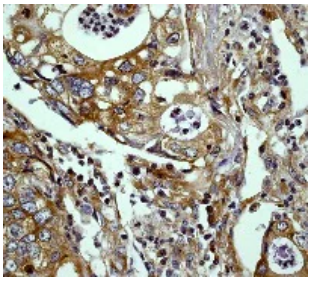
IHC image of ab32537 staining ERK1 in Human tonsil formalin fixed paraffin embedded tissue sections, performed on a Leica Bond. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab32537, 2µg/ml dilution, for 15 mins at room temperature and detected

using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX. No primary antibody was used in the secondary only control (shown on the inset).
For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.



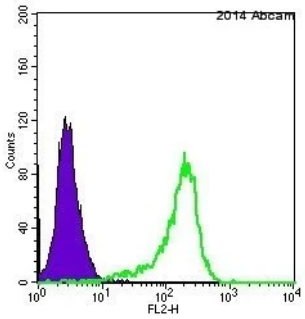
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ERK1 antibody [Y72] (ab32537)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human cervix carcinoma tissue labelling ERK1 with purified ab32537 at a dilution of 1/50. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9. ab97051, a HRP-conjugated goat anti-rabbit IgG (H+L) was used as the secondary antibody (1/500). Negative control using PBS instead of primary antibody. Counterstained with hematoxylin.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-ERK1 antibody [Y72] (ab32537)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human lung carcinoma tissue labelling ERK1 with unpurified ab32537.
Perform heat mediated antigen retrieval before commencing with IHC staining protocol.

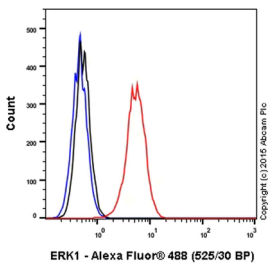


This image is courtesy of an anonymous customer review

Flow Cytometry (Intracellular) - Anti-ERK1 antibody [Y72] (ab32537)

ERK1 Flow Cytometry (Intracellular) staining using rabbit Anti-ERK1 antibody

Unpurified ab32537 staining ERK1 (green) in HEK293 cells by intracellular flow cytometry. Cells were fixed with paraformaldehyde and permeabilized with 70% methanol. The sample was incubated with the primary antibody (1/40 in PBS + 0.2% BSA + 0.1% sodium azide) for 1 hour at 22°C. A phycoerythrin-conjugated goat anti-rabbit IgG (1/100) was used as the secondary antibody. Gating Strategy: Live Cells. Purple plot represents isotype control.

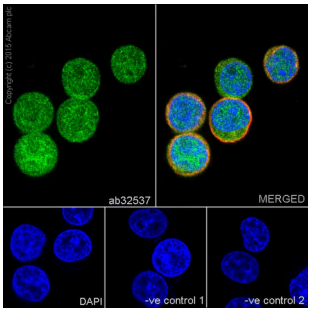


Flow Cytometry (Intracellular) - Anti-ERK1 antibody [Y72] (ab32537)

ERK1 Flow Cytometry (Intracellular) staining using rabbit Anti-ERK1 antibody

Overlay histogram showing HeLa cells stained with ab32537 (red line). The cells were fixed with 4% formaldehyde (10 min) and then permeabilized with 0.1% PBS-Tween 20 for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab32537, 1/11312) for 30 min at 22°C. The secondary antibody used was Alexa Fluorr® 488 goat anti-rabbit IgG (H&L) (ab150081) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (ab172730, 0.01µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control.
Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.

This antibody gave a positive signal in HeLa cells fixed with 80% methanol (5 min)/permeabilized with 0.1% PBS-Tween 20 for 20 min used under the same conditions.

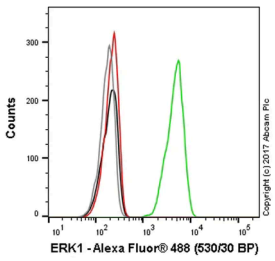


Immunocytochemistry/ Immunofluorescence - Anti-ERK1 antibody [Y72] (ab32537)

ERK1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-ERK1 antibody

Immunocytochemistry/Immunofluorescence analysis of Jurkat cells labelling ERK1 with purified ab32537 at a dilution of 1/100. Cells were fixed with 4% paraformaldehyde and permeabilized with 0.1% Triton X-100. ab150077, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000) was used as the secondary antibody. DAPI (blue) was used as the nuclear counterstain. ab7291, a mouse anti-tubulin (1/1000) and ab150120, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000) were also used.
Control 1: primary antibody (1/100) and secondary antibody, ab150120, an Alexa Fluor® 594-conjugated goat anti-mouse IgG (1/1000).

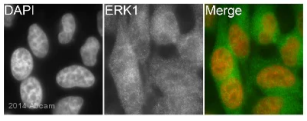
Control 2: ab7291 (1/1000) and secondary antibody, ab150077, an Alexa Fluor® 488-conjugated goat anti-rabbit IgG (1/1000).



Flow Cytometry (Intracellular) - Anti-ERK1 antibody [Y72] (ab32537)

ERK1 Flow Cytometry (Intracellular) staining using rabbit Anti-ERK1 antibody

Overlay histogram showing HAP1 wildtype (green line) and HAP1-MAPK3 knockout cells (red line) stained with ab32537. The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Triton X-100 for 15 min. The cells were then incubated in 1x PBS / 10% normal goat serum to block non-specific protein-protein interactions followed by the antibody (ab32537, 1µg/ml) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H&L) (ab150081) at 1/2000 dilution for 30 min at 22°C. A Rabbit IgG isotype control antibody (ab172730) was used at the same concentration and conditions as the primary antibody (HAP1 wildtype - black line, HAP1-MAPK3 knockout - grey line). Unlabelled sample was also used as a control (this line is not shown for the purpose of simplicity). Acquisition of >5,000 events were collected using a 50 mW Blue laser (488nm) and 530/30 bandpass filter.

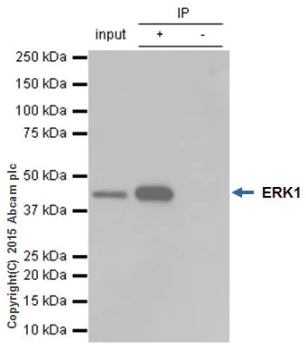


This image is courtesy of a customer review submitted by Kirk McManus.

Immunocytochemistry/ Immunofluorescence - Anti-ERK1 antibody [Y72] (ab32537)

ERK1 Immunocytochemistry/ Immunofluorescence staining using rabbit Anti-ERK1 antibody

Unpurified ab32537 staining ERK1 in HeLa cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with paraformaldehyde and permeabilized with 0.5% Triton X-100 in PBS. Samples were incubated with primary antibody (1/500 in PBS) for 1 hour at 22°C. ab150081, a goat anti rabbit Alexa Fluor® 488 (1/200) was used as the secondary antibody. Counterstained with DAPI. Cytoplasmic and nuclear staining shown.



Immunoprecipitation - Anti-ERK1 antibody [Y72] (ab32537)

ab32537 (purified) at a dilution of 1/20 immunoprecipitating ERK1 in Jurkat whole cell lysate.
Lane 1 (input): Jurkat whole cell lysate (10µg)

Lane 2 (+): ab32537 + Jurkat whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab32537 in Jurkat whole cell lysate.

For western blotting, ab131366 VeriBlot for IP (HRP) was used for detection (1/10000).

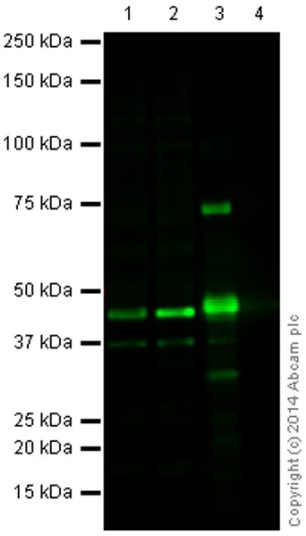
Blocking buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM /TBST.

All lanes:
Immunoprecipitation - Anti-ERK1 antibody [Y72] (ab32537)

Predicted band size: 43 kDa

Observed band size: 44 kDa



Western blot - Anti-ERK1 antibody [Y72] (ab32537)

ERK1 Western blot staining using rabbit Anti-ERK1 antibody

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using Licor blocking buffer before being incubated with ab32537 overnight at 4°C. Antibody binding was detected using a goat anti-rabbit Alexa Fluor® 790 ab175781 at a 1:10,000 dilution for 1hr at room temperature and then imaged using the Licor Odyssey CLx.
All lanes:
Western blot - Anti-ERK1 antibody [Y72] (ab32537) at 1/1000 dilution

Lane 1:
HeLa (Human epithelial carcinoma cell line) Whole Cell Lysate at 20 µg

Lane 2:
HEK293 (Human embryonic kidney cell line) Whole Cell Lysate at 20 µg

Lane 3:
Recombinant Human ERK1 protein (ab43623) (ab43623) at 20 µg

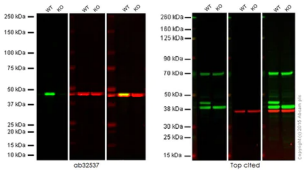
Lane 4:
Western blot - Recombinant Human ERK2 protein (Tag Free) (ab43625) at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (Alexa Fluor® 790) (ab175781) at 1/10000 dilution

Predicted band size: 43 kDa

Observed band size: 44 kDa



Western blot - Anti-ERK1 antibody [Y72] (ab32537)

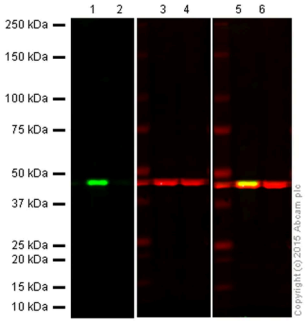
ERK1 Western blot staining using rabbit Anti-ERK1 antibody

Lanes 1, 3 and 5: Wild-type HAP1 cell lysate (20 µg)
Lanes 2, 4 and 6: ERK1 knockout HAP1 cell lysate (20 µg)
Lanes 1 and 2: Green signal from target
Lanes 3 and 4: Red signal from loading control
Lanes 5 and 6: Merged (red and green) signal
Red - loading control, ab8226 observed at 42 kDa or ab8245, observed at 37 kDa

This western blot image is a comparison between ab32537 and a competitor's top cited rabbit polyclonal antibody.

All lanes:
Western blot - Anti-ERK1 antibody [Y72] (ab32537)

Predicted band size: 43 kDa

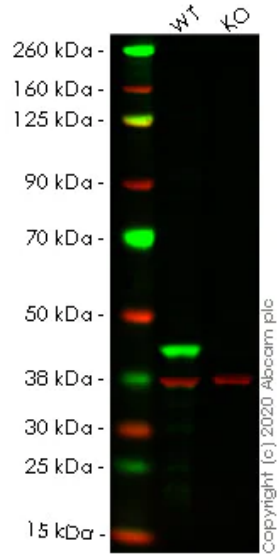


Western blot - Anti-ERK1 antibody [Y72] (ab32537)

ERK1 Western blot staining using rabbit Anti-ERK1 antibody

Lanes 1, 3 and 5: Wild-type HAP1 cell lysate (20 µg)
Lanes 2, 4 and 6: ERK1 knockout HAP1 cell lysate (20 µg)
Lanes 1 and 2: Green signal from target - ab32537 observed at 42 kDa
Lanes 3 and 4: Red signal from loading control - ab8226 observed at 42 kDa
Lanes 5 and 6: Merged (red and green) signal
ab32537 was shown to specifically react with ERK1 when ERK1 knockout samples were used. Wild-type and ERK1 knockout samples were subjected to SDS-PAGE. ab32537 and ab8226 (loading control to beta actin) were both diluted 1/1000 and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (ab216773) andGoat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (ab216776) secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.
All lanes:
Western blot - Anti-ERK1 antibody [Y72] (ab32537)

Predicted band size: 43 kDa



Western blot - Anti-ERK1 antibody [Y72] (ab32537)

ERK1 Western blot staining using rabbit Anti-ERK1 antibody

Lanes 1- 2: Merged signal (red and green). Green - ab32537 observed at 43 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (ab8245) observed at 37 kDa.
ab32537 was shown to react with ERK1 in wild-type HEK-293T cells in western blot. Loss of signal was observed when knockout cell line ab266519 (knockout cell lysate ab257099) was used. Wild-type HEK-293T and MAPK3 knockout HEK-293T cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab32537 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.

All lanes:

Western blot - Anti-ERK1 antibody [Y72] (ab32537) at 1/1000 dilution

Lane 1:
Wild-type HEK-293T cell lysate at 20 µg

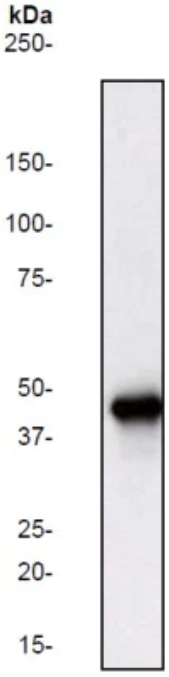
Lane 2:
MAPK3 knockout HEK-293T cell lysate at 20 µg

Lane 2:
Western blot - Human MAPK3 (ERK1) knockout HEK-293T cell line (ab266519)

Performed under reducing conditions.

Predicted band size: 43 kDa

Observed band size: 43 kDa



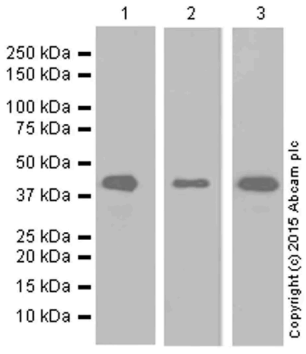
Western blot - Anti-ERK1 antibody [Y72] (ab32537)

All lanes:
Western blot - Anti-ERK1 antibody [Y72] (ab32537) at 1/1000 dilution

All lanes:
Jurkat cell lysate

Predicted band size: 43 kDa

Observed band size: 43 kDa



Western blot - Anti-ERK1 antibody [Y72] (ab32537)

Blocking and dilution buffer: 5% NFDM/TBST
All lanes:
Western blot - Anti-ERK1 antibody [Y72] (ab32537) at 1/10000 dilution

Lane 1:
293T whole cell lysate at 10 µg

Lane 2:
HeLa whole cell lysate at 10 µg

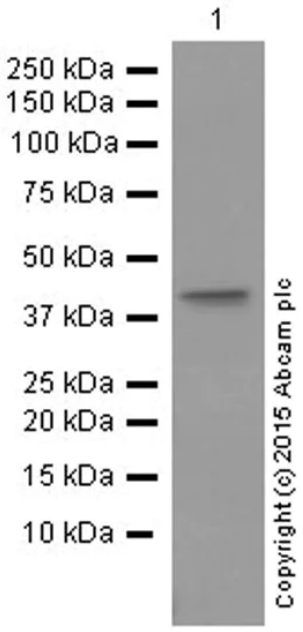
Lane 3:
Jurkat whole cell lysate at 10 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 43 kDa

Observed band size: 44 kDa



Western blot - Anti-ERK1 antibody [Y72] (ab32537)

ERK1 Western blot staining of RAW264.7 whole cell lysate using rabbit Anti-ERK1 antibody

Blocking and dilution buffer: 5% NFDM/TBST
All lanes:
Western blot - Anti-ERK1 antibody [Y72] (ab32537) at 1/1000 dilution

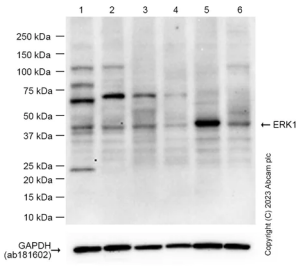
All lanes:
RAW264.7 whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/10000 dilution

Predicted band size: 43 kDa

Observed band size: 44 kDa



Western blot - Anti-ERK1 antibody [Y72] (ab32537)

Blocking buffer and concentration: 5% NFDM/TBST. **Diluting buffer and concentration:** 5% NFDM/TBST. This blot was developed using a **high** sensitivity ECL substrate. ab181602 was used as a loading control.
All lanes:
Western blot - Anti-ERK1 antibody [Y72] (ab32537) at 1/1000 dilution

Lane 1:
Mouse brain lysate at 20 µg

Lane 2:
Mouse heart lysate at 20 µg

Lane 3:
Mouse kidney lysate at 20 µg

Lane 4:
Mouse spleen lysate at 20 µg

Lane 5:
Raw 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) whole cell lysate at 20 µg

Lane 6:
NIH/3T3 (Mouse embryonic fibroblast) whole cell lysate at 20 µg

Secondary

All lanes:
Western blot - Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

Predicted band size: 43 kDa

Observed band size: 43 kDa

Exposure time: 180s

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.