abcam

Product datasheet

Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [E337] ab32538

Recombinant RabMAb

14 References 5 Images

Overview

Product name	Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [E337]
Description	Rabbit monoclonal [E337] to Erk1 (pT202/pY204) + Erk2 (pT185/pY187)
Host species	Rabbit
Specificity	The antibody detects ERK1 phosphorylated on Threonine 202 and Tyrosine 204 and ERK2 phosphorylated on Threonine 185 and Tyrosine 187.
Tested applications	**Suitable for:** WB, IHC-P, Flow Cyt, ICC/IF **Unsuitable for:** IP
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide within Human Erk1 (pT202/pY204) + Erk2 (pT185/pY187). The exact sequence is proprietary. (Peptide available as ab205613)
Positive control	WB: Serum starved A431 cell lysate treated with EGF. IHC-P: Human thyroid gland cancer tissue. ICC/IF: A431 cells +- EGF.
General notes	Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMab® patents This product is a recombinant rabbit monoclonal antibody.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.40 Preservative: 0.01% Sodium azide Constituents: 50% Glycerol, 0.05% BSA
Purity	IgG fraction

Clonality	Monoclonal
Clone number	E337
Isotype	IgG

Applications

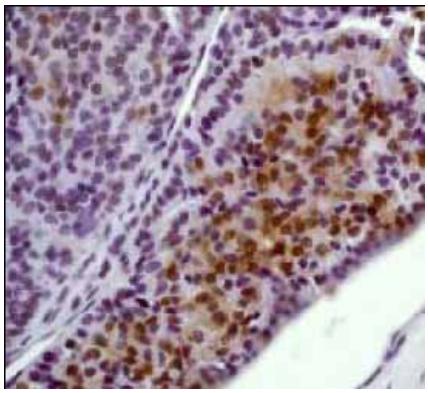
Our Abpromise guarantee covers the use of **ab32538** in the following tested applications.

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

Application	Abreviews	Notes
WB		1/500 - 1/10000. Detects a band of approximately 42, 44 kDa (predicted molecular weight: 42 , 44 kDa).Can be blocked with Human Erk1 (pT202/pY204) + Erk2 (pT185/pY187) peptide (ab205613).
IHC-P		1/50.
Flow Cyt		1/1000. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		1/200 - 1/250.

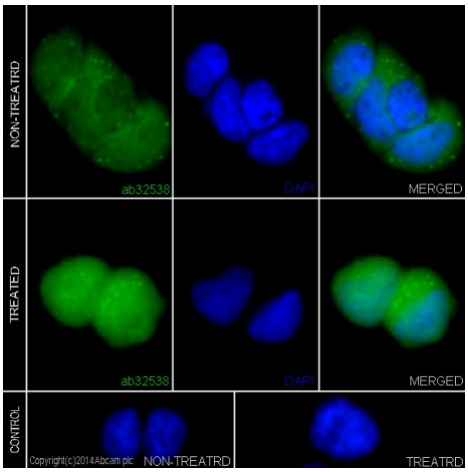
Application notes Is unsuitable for IP.

Images



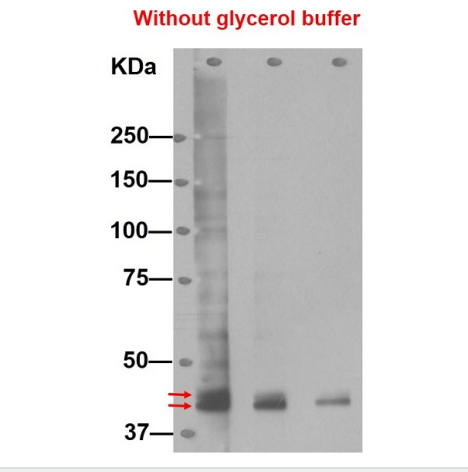
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [E337] (ab32538)

Immunohistochemical analysis of paraffin-embedded human thyroid gland cancer using anti-ERK1(pT202/pY204)/ERK2(pT185/pY187) (ab32538) at dilution of 1:50.



Immunocytochemistry/ Immunofluorescence - Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [E337] (ab32538)

Immunocytochemistry/Immunofluorescence analysis of 4% paraformaldehyde A431+-EGF(100ng/ml,5min) labelling Erk1 (pT202/pY204) + Erk2 (pT185/pY187) with ab32538 at dilution of 1/200. The secondary antibody used was Alexa Fluor® 488 Goat-Anti-Rabbit IgG (ab150077) at dilution of 1/400. The counter stain was done with DAPI (blue).



Western blot - Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [E337] (ab32538)

Lane 1 : Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [E337] (ab32538) at 1/500 dilution
Lane 2 : Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [E337] (ab32538) at 1/2000 dilution
Lane 3 : Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [E337] (ab32538) at 1/10000 dilution

All lanes : A431 treated with EGF for 10 minutes

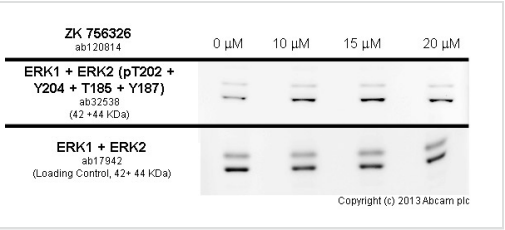
Lysates/proteins at 0.1 µg/ml per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 42 , 44 kDa
Observed band size: 42.44 kDa
why is the actual band size different from the predicted?

Exposure time: 3 minutes

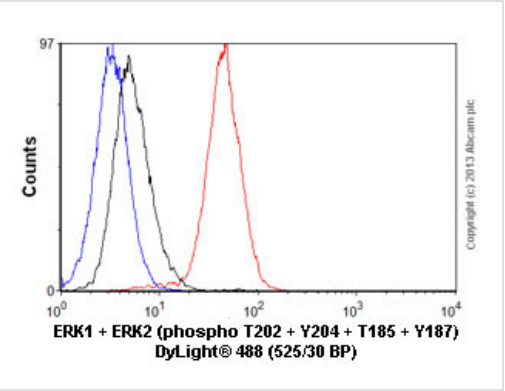
First-antibody diluted with 1% BSA.



Western blot - Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [E337] (ab32538)

THP1 cells were incubated at 37°C for 3 minutes with vehicle control (0 µM) and different concentrations of ZK 756326 (ab120814). Increased expression of ERK1 (phospho T202 + Y204) + ERK2 (phospho T185 + Y187) (ab32538) in THP1 cells correlates with an increase in ZK 756326 concentration, as described in literature.

Whole cell lysates were prepared with RIPA buffer (containing protease inhibitors and sodium orthovanadate), 10 µg of each were loaded on the gel and the WB was run under reducing conditions. After transfer the membrane was blocked for an hour using 5% BSA before being incubated with ab32538 at 1/500 dilution and ab17942 at 1 µg /ml overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP (ab97051) at 1/10000 dilution and visualised using ECL development solution.



Flow Cytometry - Anti-Erk1 (pT202/pY204) + Erk2 (pT185/pY187) antibody [E337] (ab32538)

Overlay histogram showing HeLa cells stained with ab32538 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween 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 (ab32538, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was a goat anti-rabbit DyLight® 488 (IgG; H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/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.

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.com/abpromise or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors