

Product datasheet

Anti-RSK1 p90 antibody [E4] ab32114

KO VALIDATED Recombinant RabMAB

★★★★★ 4 Abreviews 10 References 10 Images

Overview

Product name	Anti-RSK1 p90 antibody [E4]
Description	Rabbit monoclonal [E4] to RSK1 p90
Host species	Rabbit
Specificity	The mouse, rat and pig recommendation is based on the WB results. We do not guarantee IHC-P for mouse, rat and pig.
Tested applications	Suitable for: WB, IHC-P, IP, Flow Cyt (Intra), ICC/IF
Species reactivity	Reacts with: Mouse, Rat, Human Predicted to work with: Pig
Immunogen	Synthetic peptide within Human RSK1 p90 (N terminal). The exact sequence is proprietary.
Positive control	WB: MCF7, K-562, PC-12 whole cell lysate, mouse lung tissue lysate. IHC-P: Human colon tissue, Human breast cancer tissue IP: K-562 cell lysate Flow Cyt (intra): HeLa cells ICC/IF: K-562 cells
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production <p>For more information see here.</p> <p>Our RabMAB[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAB[®] patents.</p> <p>We are constantly working hard to ensure we provide our customers with best in class antibodies. As a result of this work we are pleased to now offer this antibody in purified format. We are in the process of updating our datasheets. The purified format is designated 'PUR' on our product labels. If you have any questions regarding this update, please contact our Scientific Support team.</p>

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: 7.20 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	E4
Isotype	IgG

Applications

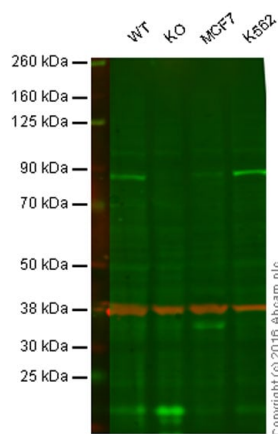
The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab32114 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (2)	1/1000. Detects a band of approximately 90 kDa (predicted molecular weight: 83 kDa).
IHC-P	★★★★★ (2)	1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols . The mouse, rat and pig recommendation is based on the WB results. We do not guarantee IHC-P for mouse, rat and pig.
IP		1/70. For unpurified format use at 1/10 dilution.
Flow Cyt (Intra)		1/100 - 1/1000. ab172730 - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
ICC/IF		1/150 - 1/200.

Target

Function	Serine/threonine kinase that may play a role in mediating the growth-factor and stress induced activation of the transcription factor CREB.
Sequence similarities	Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. S6 kinase subfamily. Contains 1 AGC-kinase C-terminal domain. Contains 2 protein kinase domains.
Post-translational modifications	Autophosphorylated on Ser-380, as part of the activation process.

Images



Western blot - Anti-RSK1 p90 antibody [E4]
(ab32114)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

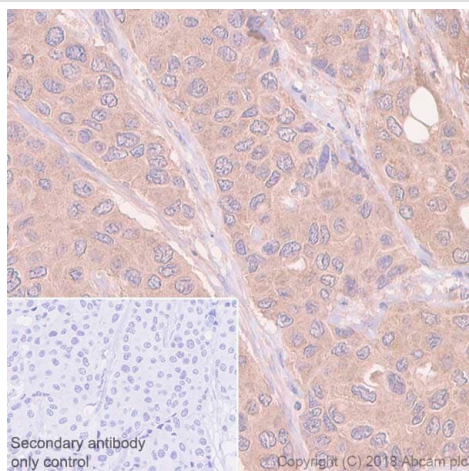
Lane 2: RSK1 p90 knockout HAP1 cell lysate (20 µg)

Lane 3: MCF7 cell lysate (20 µg)

Lane 4: K562 cell lysate (20 µg)

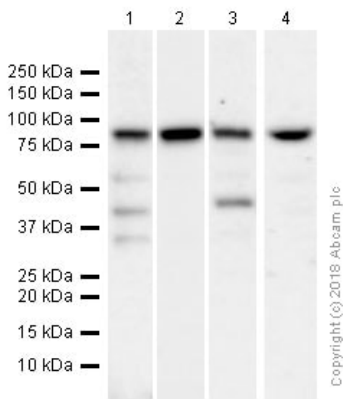
Lanes 1 - 4: Merged signal (red and green). Green - ab32114 (unpurified) observed at 88 kDa. Red - loading control, ab8245, observed at 37 kDa.

ab32114 was shown to recognize RSK1 p90 when RSK1 p90 knockout samples were used, along with additional cross-reactive bands. Wild-type and RSK1 p90 knockout samples were subjected to SDS-PAGE. ab32114 and ab8245 (loading control to GAPDH) were diluted at 1/500 and 1/10 000 respectively and incubated overnight at 4°C. 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 1/10 000 dilution for 1 h at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RSK1 p90 antibody [E4]
(ab32114)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human breast cancer tissue sections labeling RSK1 p90 with purified ab32114 at 1/100 dilution (15.4 µg/ml). Heat mediated antigen retrieval was performed using heat mediated antigen retrieval using ab93684 (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody. Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Western blot - Anti-RSK1 p90 antibody [E4] (ab32114)

All lanes : Anti-RSK1 p90 antibody [E4] (ab32114) at 1/1000 dilution (Purified)

Lane 1 : MCF7 (Human breast adenocarcinoma epithelial cell) whole cell lysates

Lane 2 : K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate

Lane 3 : Mouse lung lysates

Lane 4 : PC-12 (Rat adrenal gland pheochromocytoma) whole cell lysates

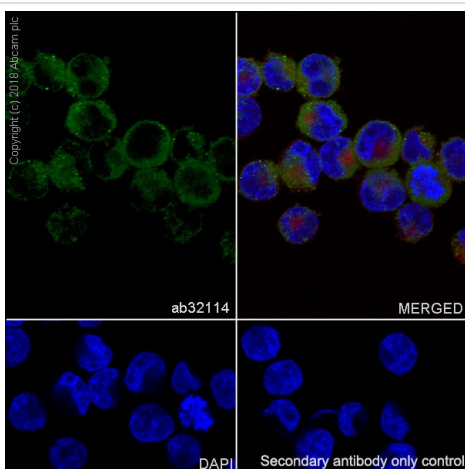
Lysates/proteins at 20 µg per lane.

Secondary

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

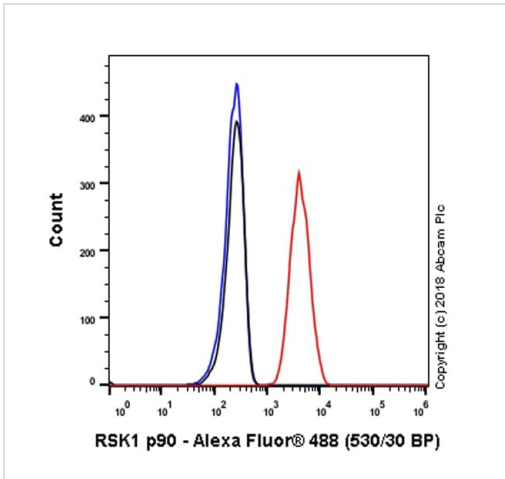
Predicted band size: 83 kDa

Observed band size: 83 kDa



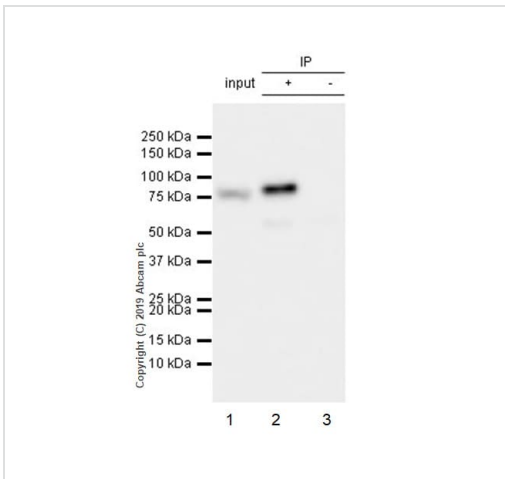
Immunocytochemistry/ Immunofluorescence - Anti-RSK1 p90 antibody [E4] (ab32114)

Immunocytochemistry/ Immunofluorescence analysis of K-562 (Human chronic myelogenous leukemia lymphoblast) cells labeling RSK1 p90 with purified ab32114 at 1/150 dilution (10 µg/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) at 1:200 (2.5 µg/ml). Goat anti rabbit IgG (Alexa Fluor® 488, ab150077) was used as the secondary antibody at 1/1000 (2 µg/ml) dilution. DAPI (blue) was used as nuclear counterstain. PBS instead of the primary antibody was used as the secondary antibody only control.



Flow Cytometry (Intracellular) - Anti-RSK1 p90 antibody [E4] (ab32114)

Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling RSK1 p90 with purified ab32114 at 1/150 dilution (10µg/ml) (red). Cells were fixed with 4% Paraformaldehyde and permeabilised with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluor® 488, [ab150077](#)) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).

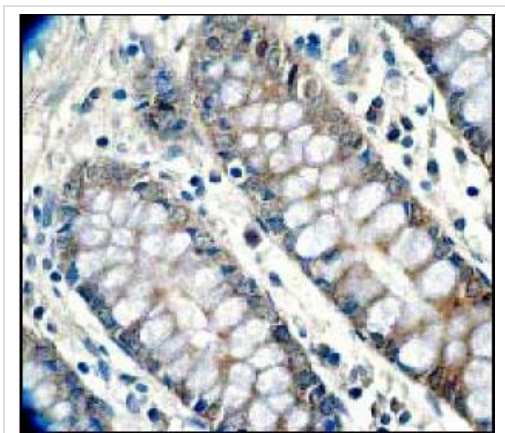


Immunoprecipitation - Anti-RSK1 p90 antibody [E4] (ab32114)

ab32114 (purified) at 1/70 dilution (2ug) immunoprecipitating RSK1 p90 in K-562 whole cell lysate. K-562 (Human chronic myelogenous leukemia lymphoblast) whole cell lysate 10ug
 Lane 2 (+): ab32114 & K-562 whole cell lysate
 Lane 3 (-): Rabbit monoclonal IgG ([ab172730](#)) instead of ab32114 in K-562 whole cell lysate

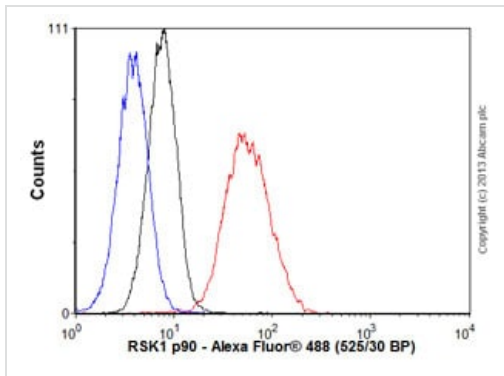
For western blotting, VeriBlot for IP secondary antibody (HRP) ([ab131366](#)) was used at 1/1000 dilution.

Blocking and diluting buffer: 5% NFDm/TBST.



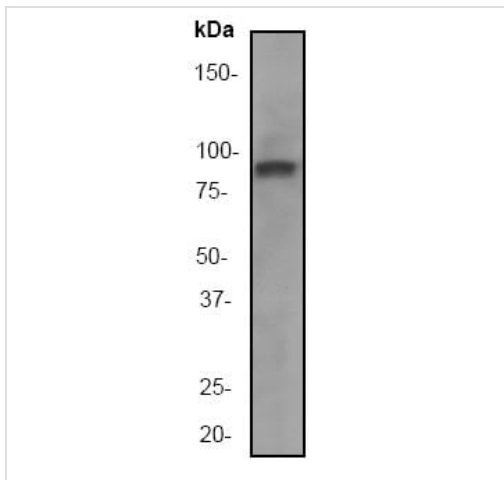
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RSK1 p90 antibody [E4] (ab32114)

Ab32114 (unpurified), at a 1/100 dilution, staining RSK1 p90 in paraffin embedded human colon tissue by immunohistochemistry.



Flow Cytometry (Intracellular) - Anti-RSK1 p90 antibody [E4] (ab32114)

Overlay histogram showing HeLa cells stained with (unpurified)ab32114 (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 (ab32114, 1/1000 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor[®] 488 goat anti-rabbit IgG (H&L) (ab150077) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (0.1µg/1x10⁶ 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 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Western blot - Anti-RSK1 p90 antibody [E4] (ab32114)

Anti-RSK1 p90 antibody [E4] (ab32114) at 1/1000 dilution (unpurified) + MCF7 cell lysate at 10 µg

Predicted band size: 83 kDa

Observed band size: 90 kDa

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-RSK1 p90 antibody [E4] (ab32114)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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