

## Product datasheet

# Anti-RSK1 p90 (phospho T359 + S363) antibody [E238] ab32413

Recombinant RabMAb

★★★★★ 3 Abreviews 13 References 6 Images

### Overview

<b>Product name</b>	Anti-RSK1 p90 (phospho T359 + S363) antibody [E238]
<b>Description</b>	Rabbit monoclonal [E238] to RSK1 p90 (phospho T359 + S363)
<b>Host species</b>	Rabbit
<b>Specificity</b>	This antibody is specific for human RSK1 p90 phosphorylated on Threonine 359 and Serine 363. 80% identities with RSK3 p90 (pT365+pS369), 75% with RSK2 p90 (pT356+pS360) and 74% identities with RSK6 p90 (pT368+pS372)
<b>Tested applications</b>	<b>Suitable for:</b> WB, IHC-P, IP, Dot blot <b>Unsuitable for:</b> Flow Cyt or ICC
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human
<b>Immunogen</b>	Synthetic peptide within Human RSK1 p90 aa 350-450. The exact sequence is proprietary.
<b>Positive control</b>	WB: A431 and NIH/3T3 cell lysates. IHC-P: Human cervical carcinoma tissue. IP: NIH/3T3 cell lysate
<b>General notes</b>	

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<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to [RabMAb<sup>®</sup> patents](#).

Reproducibility is key to advancing scientific discovery and accelerating scientists' next breakthrough.

Abcam is leading the way with our range of recombinant antibodies, knockout-validated antibodies and knockout cell lines, all of which support improved reproducibility.

We are also planning to innovate the way in which we present recommended applications and species on our product datasheets, so that only applications & species that have been tested in

our own labs, our suppliers or by selected trusted collaborators are covered by our Abpromise™ guarantee.

In preparation for this, we have started to update the applications & species that this product is Abpromise guaranteed for.

We are also updating the applications & species that this product has been “predicted to work with,” however this information is not covered by our Abpromise guarantee.

Applications & species from publications and Abreviews that have not been tested in our own labs or in those of our suppliers are not covered by the Abpromise guarantee.

Please check that this product meets your needs before purchasing. If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, as well as customer reviews and Q&As.

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	E238
<b>Isotype</b>	IgG

## Applications

Our [Abpromise guarantee](#) covers the use of **ab32413** 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	★★★★★	1/1000 - 1/10000. Detects a band of approximately 90 kDa (predicted molecular weight: 90 kDa).
IHC-P	★★★★★	Use at an assay dependent concentration. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IP		1/100.
Dot blot		1/1000.
<b>Application notes</b>		Is unsuitable for Flow Cyt or ICC.

## Target

<b>Function</b>	Serine/threonine kinase that may play a role in mediating the growth-factor and stress induced activation of the transcription factor CREB.
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## Sequence similarities

Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. S6 kinase subfamily.

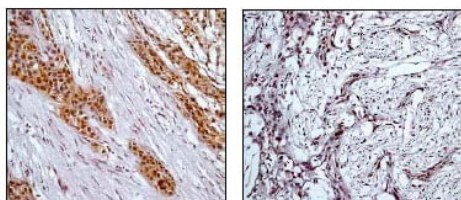
Contains 1 AGC-kinase C-terminal domain.

Contains 2 protein kinase domains.

## Post-translational modifications

Autophosphorylated on Ser-380, as part of the activation process.

## Images



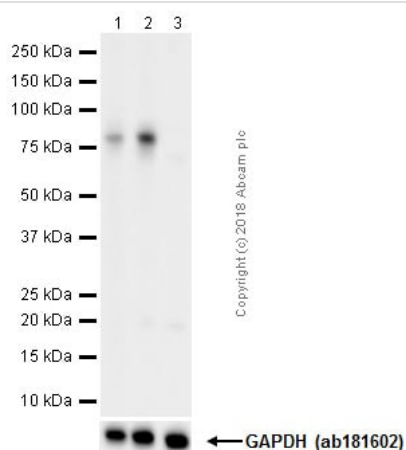
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RSK1 p90 (phospho T359 + S363) antibody [E238] (ab32413)

Ab32413, at a 1/100 dilution, staining RSK1 p90 in paraffin embedded human cervical carcinoma tissue by Immunohistochemistry.

Left image : Untreated.

Right image : Treated with Phosphatase.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Western blot - Anti-RSK1 p90 (phospho T359 + S363) antibody [E238] (ab32413)

**All lanes** : Anti-RSK1 p90 (phospho T359 + S363) antibody [E238] (ab32413) at 1/1000 dilution (purified)

**Lane 1** : NIH/3T3 (mouse embryonic fibroblast) grown in serum free media for 4 hour whole cell lysate

**Lane 2** : NIH/3T3 grown in serum free media for 4 hours, then treated with 20% FBS for 30 minutes whole cell lysate

**Lane 3** : NIH/3T3 grown in serum free media for 4 hours, then treated with 20% FBS for 30 minutes whole cell lysate. Then the membrane was incubated with alkaline phosphatase

Lysates/proteins at 10 µg per lane.

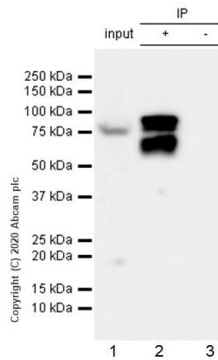
## Secondary

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

**Predicted band size:** 90 kDa

**Observed band size:** 90 kDa

Blocking/Diluting Buffer and concentration 5% NFDN/TBST



Immunoprecipitation - Anti-RSK1 p90 (phospho T359 + S363) antibody [E238] (ab32413)

Purified ab32413 at 1/100 dilution (2µg) immunoprecipitating RSK1 p90 in NIH/3T3 whole cell lysate.

Lane 1 (input): NIH/3T3 (Mouse embryonic fibroblast) serum starved for 4h, then treated with 20% FBS for 30min whole cell lysate 10µg

Lane 2 (+): ab32413 + NIH/3T3 whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab171376 in NIH/3T3 whole cell lysate.

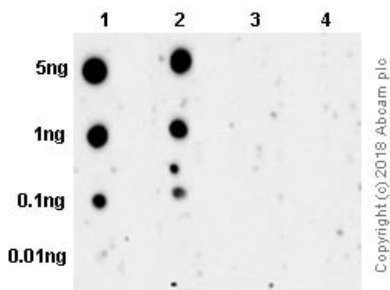
VeriBlot for IP Detection Reagent (HRP) (ab131366) (1/1000 dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDm/TBST.

Diluting buffer and concentration: 5% NFDm/TBST.

Observed band size: 90 kDa

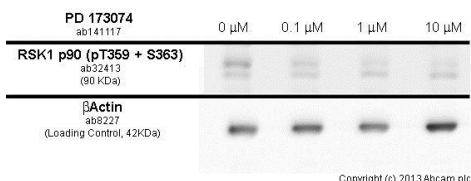
Lower bands could be cleavage product. (PMID: 29290690)



Dot Blot - Anti-RSK1 p90 (phospho T359 + S363) antibody [E238] (ab32413)

Dot blot analysis of RSK1 p90 (phospho T359 + S363) phospho peptide (Lane 1), RSK1 p90 phospho T359 phospho peptide (Lane 2), RSK1 p90 phospho S36 phospho peptide (Lane 3) and RSK1 p90 non-phospho peptide (Lane 4) labeling RSK1 p90 (phospho T359 + S363) phospho peptide with purified ab32413 at a dilution of 1/1000 dilution (2.056ug/ml). A Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ab97051) was used as the secondary antibody at a dilution of 1/20,000 dilution.

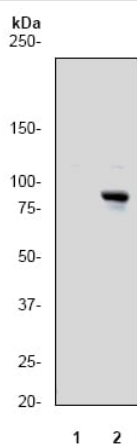
Blocking buffer: 5% NFDm/TBST. Dilution buffer: 5% NFDm/TBST



Western blot - Anti-RSK1 p90 (phospho T359 + S363) antibody [E238] (ab32413)

BT549 cells were incubated at 37 °C for 1h with vehicle control (0 µM) and different concentrations of PD 173074 (ab141117) in DMSO. Decreased expression of RSK1 p90 (phospho T359 + S363) (ab32413) correlates with an increase in PD 173074 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 ab32413 at 1/5000 dilution and ab8227 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.



Western blot - Anti-RSK1 p90 (phospho T359 + S363) antibody [E238] (ab32413)

**All lanes :** Anti-RSK1 p90 (phospho T359 + S363) antibody [E238] (ab32413) at 1/20000 dilution

**Lane 1 :** A431 cell lysate untreated.

**Lane 2 :** A431 cell lysate treated with EGF.

**Predicted band size:** 90 kDa

**Observed band size:** 90 kDa

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

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