

## Product datasheet

### Anti-RSK4 antibody [EP1982Y] ab76117

KO VALIDATED Recombinant RabMAb

[7 References](#) [11 Images](#)

#### Overview

Product name	Anti-RSK4 antibody [EP1982Y]
Description	Rabbit monoclonal [EP1982Y] to RSK4
Host species	Rabbit
Tested applications	<b>Suitable for:</b> Flow Cyt (Intra), WB, ICC/IF, IHC-P
Species reactivity	<b>Reacts with:</b> Mouse, Rat, Human
Immunogen	Synthetic peptide within Human RSK4 aa 1-100 (N terminal). The exact sequence is proprietary. Database link: <a href="#">Q9UK32</a>
Positive control	SH-SY5Y cell lysate. Human brain glioma tissue. SH-Sy5y cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</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. Avoid freeze / thaw cycle.
Storage buffer	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA</p>
Purity	Protein A purified
Clonality	Monoclonal

Clone number	EP1982Y
Isotype	IgG

## Applications

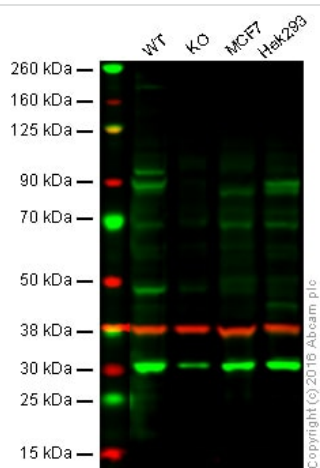
**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab76117 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/25 - 1/70. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/250 - 1/1000. Detects a band of approximately 90 kDa (predicted molecular weight: 84 kDa).
ICC/IF		1/100 - 1/1000.
IHC-P		1/50 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See <b>IHC antigen retrieval protocols</b> .

## 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.
<b>Sequence similarities</b>	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.
<b>Post-translational modifications</b>	Autophosphorylated on Ser-389, as part of the activation process.

## Images



Western blot - Anti-RSK4 antibody [EP1982Y]  
(ab76117)

**Lane 1:** Wild-type HAP1 cell lysate (40 µg)

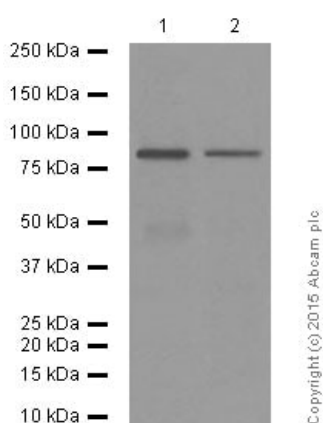
**Lane 2:** RSK4 knockout HAP1 cell lysate (40 µg)

**Lane 3:** MCF7 cell lysate (20 µg)

**Lane 4:** HEK293 cell lysate (20 µg)

**Lanes 1 - 4:** Merged signal (red and green). Green - ab76117 observed at 90 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab76117 was shown to recognize RSK4 when RSK4 knockout samples were used, along with additional cross-reactive bands. Wild-type and RSK4 knockout samples were subjected to SDS-PAGE. Ab76117 and **ab8245** (loading control to GAPDH) were diluted at 1/250 and 1/10,000 dilution 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 hour at room temperature before imaging.



Western blot - Anti-RSK4 antibody [EP1982Y]  
(ab76117)

**All lanes :** Anti-RSK4 antibody [EP1982Y] (ab76117) at 1/1000 dilution (purified)

**Lane 1 :** SH-SY5Y cell lysate

**Lane 2 :** Caco-2 cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

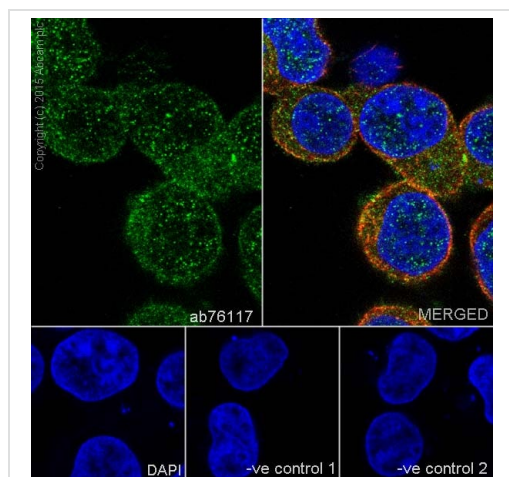
**All lanes :** HRP goat anti-rabbit IgG (H+L) at 1/1000 dilution

**Predicted band size:** 84 kDa

**Observed band size:** 90 kDa

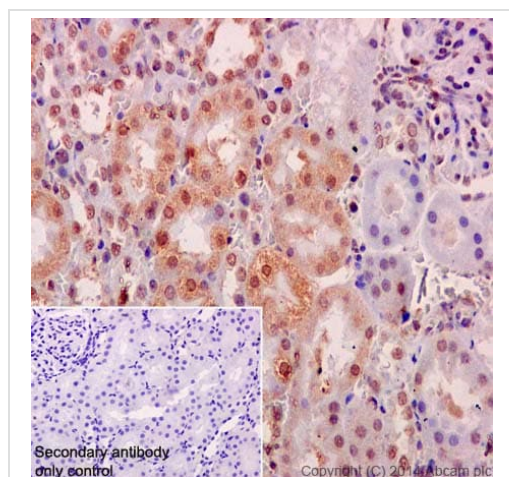
Blocking buffer: 5% NFDM/TBST

Dilution buffer: 5% NFDM/TBST



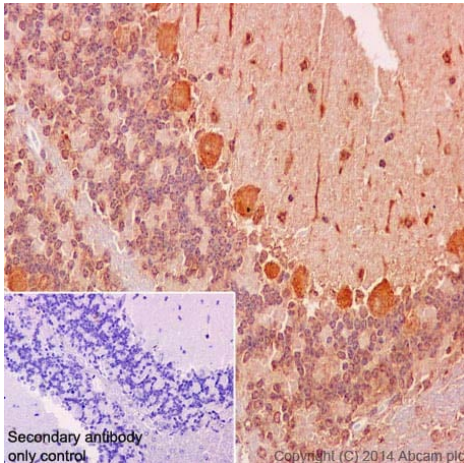
Immunocytochemistry/ Immunofluorescence - Anti-RSK4 antibody [EP1982Y] (ab76117)

Immunofluorescence staining of HEK293 cells with purified ab76117 at a working dilution of 1/1000, counter-stained with DAPI. The secondary antibody was Alexa Fluor® 488 goat anti-rabbit (**ab150077**), used at a dilution of 1/1000. **ab7291**, a mouse anti-tubulin antibody (1/1000), was used to stain tubulin along with **ab150120** (Alexa Fluor® 594 goat anti-mouse, 1/1000), shown in the top right hand panel. The cells were fixed in 4% PFA and permeabilized using 0.1% Triton X 100. The negative controls are shown in bottom middle and right hand panels - for negative control 1, purified ab76117 was used at a dilution of 1/500 followed by an Alexa Fluor® 594 goat anti-mouse antibody (**ab150120**) at a dilution of 1/500. For negative control 2, **ab7291** (mouse anti-tubulin) was used at a dilution of 1/500 followed by an Alexa Fluor® 488 goat anti-rabbit antibody (**ab150077**) at a dilution of 1/400.



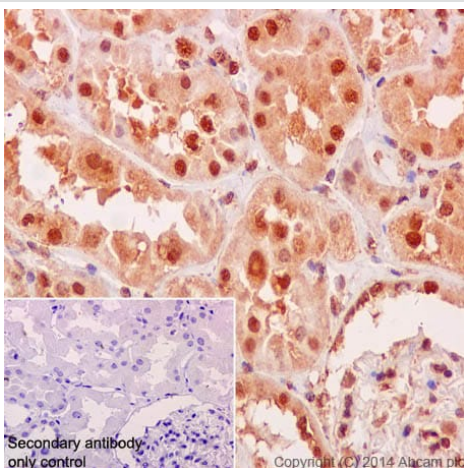
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RSK4 antibody [EP1982Y] (ab76117)

Immunohistochemical staining of paraffin embedded rat kidney with purified ab76117 at a working dilution of 1/250. The secondary antibody used is HRP goat anti-rabbit IgG H&L (**ab97051**) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



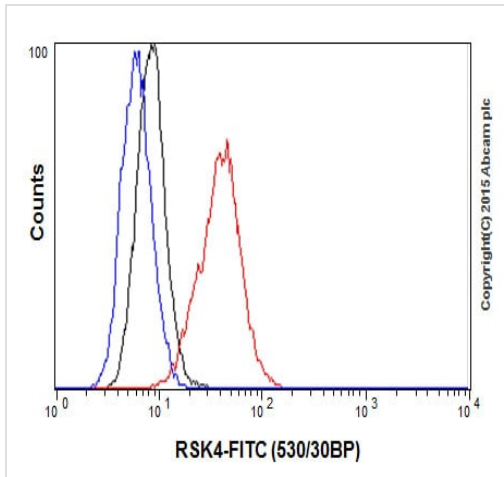
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RSK4 antibody [EP1982Y] (ab76117)

Immunohistochemical staining of paraffin embedded mouse cerebral cortex with purified ab76117 at a working dilution of 1/250. The secondary antibody used is HRP goat anti-rabbit IgG H&L ([ab97051](#)) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



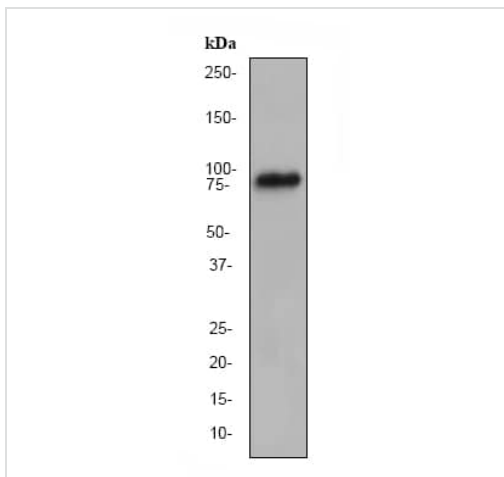
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-RSK4 antibody [EP1982Y] (ab76117)

Immunohistochemical staining of paraffin embedded human kidney with purified ab76117 at a working dilution of 1/250. The secondary antibody used is HRP goat anti-rabbit IgG H&L ([ab97051](#)) at 1/500. The sample is counter-stained with hematoxylin. Antigen retrieval was performed using Tris-EDTA buffer, pH 9.0. PBS was used instead of the primary antibody as the negative control, and is shown in the inset.



Flow Cytometry (Intracellular) - Anti-RSK4 antibody  
[EP1982Y] (ab76117)

Overlay histogram showing Neuro-2a cells fixed in 2% PFA and stained with purified ab76117 at a dilution of 1 in 70 (red line). The secondary antibody used was FITC goat anti-rabbit at a dilution of 1 in 500. Rabbit monoclonal IgG was used as an isotype control (black line) and cells incubated in the absence of both primary and secondary antibody were used as a negative control (blue line).



Western blot - Anti-RSK4 antibody [EP1982Y]  
(ab76117)

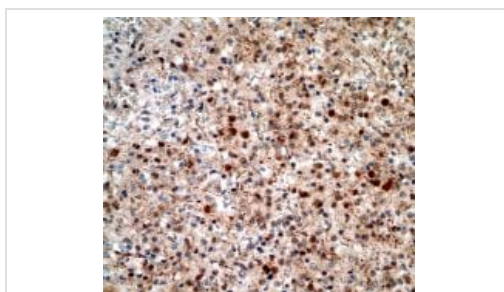
Anti-RSK4 antibody [EP1982Y] (ab76117) at 1/500 dilution  
(unpurified) + SH-SY5Y cell lysate at 10 µg

#### Secondary

HRP labelled goat anti-rabbit at 1/2000 dilution

**Predicted band size:** 84 kDa

**Observed band size:** 90 kDa

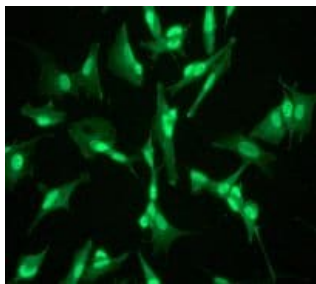


Immunohistochemistry (Formalin/PFA-fixed paraffin-  
embedded sections) - Anti-RSK4 antibody  
[EP1982Y] (ab76117)

Unpurified ab76117, at 1/50 dilution, staining RSK4 in paraffin-  
embedded human brain glioma tissue.

Perform heat mediated antigen retrieval before commencing with  
IHC staining protocol.





Immunofluorescent staining of SH-Sy5y cells using unpurified ab76117 at 1/100 dilution.

Immunocytochemistry/ Immunofluorescence - Anti-  
RSK4 antibody [EP1982Y] (ab76117)

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-RSK4 antibody [EP1982Y] (ab76117)

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