

## Product datasheet

# Anti-PKA R2/PKR2 (phospho S99) antibody [E151] ab32390

Recombinant RabMAb

★★★★★ 1 Abreviews 30 References 11 Images

### Overview

<b>Product name</b>	Anti-PKA R2/PKR2 (phospho S99) antibody [E151]
<b>Description</b>	Rabbit monoclonal [E151] to PKA R2/PKR2 (phospho S99)
<b>Host species</b>	Rabbit
<b>Specificity</b>	<p>The antibody only detects PKA R2/PKR2 phosphorylated on Serine 99. Phosphoserine 99 in Human corresponds to phosphoserine 96 in mouse.</p> <p>The mouse and pig recommendation is based on the WB results. We do not guarantee IHC-P for mouse and pig.</p>
<b>Tested applications</b>	<p><b>Suitable for:</b> WB, IHC-P, ICC/IF</p> <p><b>Unsuitable for:</b> Flow Cyt</p>
<b>Species reactivity</b>	<b>Reacts with:</b> Mouse, Rat, Human, Pig
<b>Immunogen</b>	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
<b>Positive control</b>	WB: K562 cell lysate. HeLa starved for 3 hours and then treated with 100 nM Calyculin A for 30 minutes, NIH/3T3, NIH/3T3 treated with Calyculin A, and C6 treated with 100 ng/ml Calyculin A for 1 hour cell lysates. Pig heart lysates. ICC/IF: HeLa cells. IHC-P: Human lymph node metastatic tissue. Human kidney without Lambda Protein Phosphatase treatment (image A) and Rat kidney without Lambda Protein Phosphatase treatment
<b>General notes</b>	<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><b>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.</b></p>

## Properties

<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: PBS, 0.05% BSA, 40% Glycerol (glycerin, glycerine)
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	E151
<b>Isotype</b>	IgG

## Applications

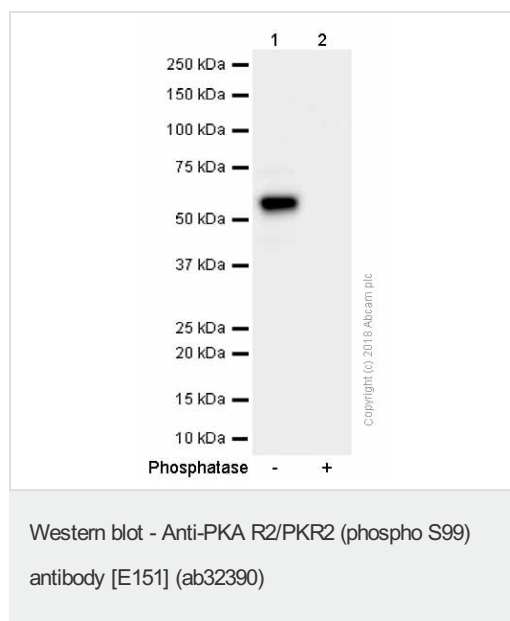
**The Abpromise guarantee** Our [Abpromise guarantee](#) covers the use of ab32390 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ (1)	1/1000. Detects a band of approximately 51 kDa (predicted molecular weight: 45 kDa). <b>For unpurified use at 1/2500</b>
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. The mouse and pig recommendation is based on the WB results. We do not guarantee IHC-P for mouse and pig. <a href="#">See IHC antigen retrieval protocols.</a> <b>For unpurified use at 1/250</b>
ICC/IF		1/500.

**Application notes** Is unsuitable for Flow Cyt.

## Target

<b>Function</b>	Regulatory subunit of the cAMP-dependent protein kinases involved in cAMP signaling in cells. Type II regulatory chains mediate membrane association by binding to anchoring proteins, including the MAP2 kinase.
<b>Tissue specificity</b>	Four types of regulatory chains are found: I-alpha, I-beta, II-alpha, and II-beta. Their expression varies among tissues and is in some cases constitutive and in others inducible.
<b>Sequence similarities</b>	Belongs to the cAMP-dependent kinase regulatory chain family. Contains 2 cyclic nucleotide-binding domains.
<b>Post-translational modifications</b>	Phosphorylated by the activated catalytic chain.
<b>Cellular localization</b>	Cytoplasm. Cell membrane. Colocalizes with PJA2 in the cytoplasm and the cell membrane.



**All lanes :** Anti-PKA R2/PKR2 (phospho S99) antibody [E151] (ab32390) at 1/1000 dilution (Purified)

**Lane 1 :** Pig heart lysates

**Lane 2 :** Pig heart. Then the membrane was incubated with phosphatase

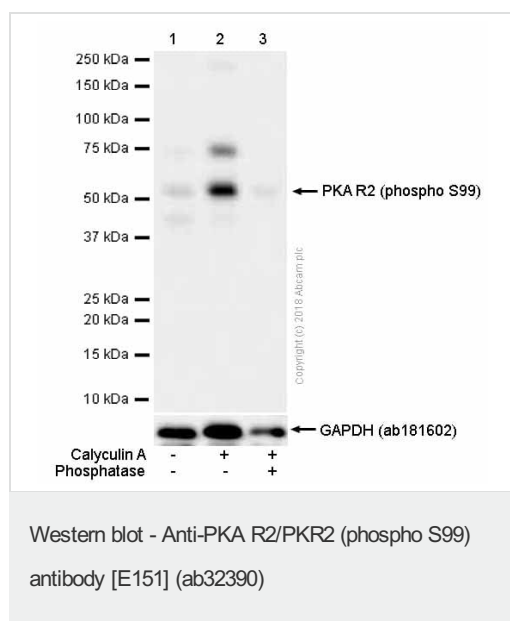
Lysates/proteins at 15 µg per lane.

**Secondary**

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

**Predicted band size:** 45 kDa

**Observed band size:** 51 kDa



**All lanes :** Anti-PKA R2/PKR2 (phospho S99) antibody [E151] (ab32390) at 1/1000 dilution (Purified)

**Lane 1 :** C6 (Rat glial tumor glial cell) whole cell lysates

**Lane 2 :** C6 (Rat glial tumor glial cell) treated with 100ng/ml Calyculin A for 1 hour

**Lane 3 :** C6 (Rat glial tumor glial cell) treated with 100ng/ml Calyculin A for 1 hour. Then the membrane was incubated with phosphatase

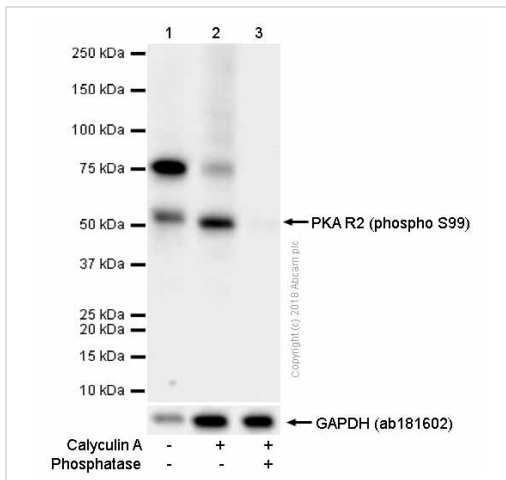
Lysates/proteins at 15 µg per lane.

**Secondary**

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

**Predicted band size:** 45 kDa

**Observed band size:** 51 kDa



Western blot - Anti-PKA R2/PKR2 (phospho S99) antibody [E151] (ab32390)

**All lanes** : Anti-PKA R2/PKR2 (phospho S99) antibody [E151] (ab32390) at 1/1000 dilution (Purified)

**Lane 1** : NIH/3T3 (Mouse embryonic fibroblast) whole cell lysates

**Lane 2** : NIH/3T3 (Mouse embryonic fibroblast) treated with Calyculin A

**Lane 3** : NIH/3T3 (Mouse embryonic fibroblast) treated with Calyculin A. Then the membrane was incubated with phosphatase

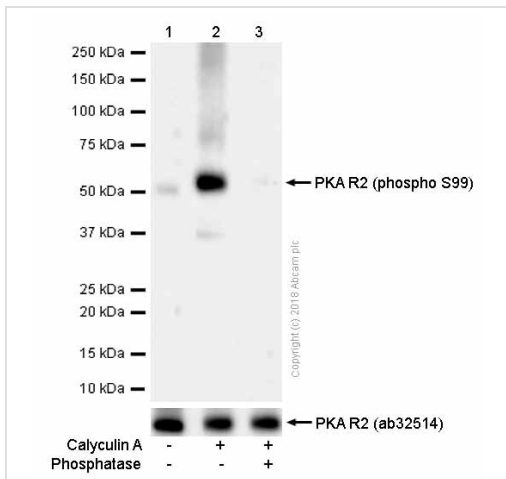
Lysates/proteins at 15 µg per lane.

### Secondary

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

**Predicted band size:** 45 kDa

**Observed band size:** 51 kDa



Western blot - Anti-PKA R2/PKR2 (phospho S99) antibody [E151] (ab32390)

**All lanes** : Anti-PKA R2/PKR2 (phospho S99) antibody [E151] (ab32390) at 1/1000 dilution (Purified)

**Lane 1** : HeLa (Human cervix adenocarcinoma epithelial cell) whole cell lysates

**Lane 2** : HeLa (Human cervix adenocarcinoma epithelial cell) were starved for 3 hours and then treated with 100 nM Calyculin A for 30 minutes

**Lane 3** : HeLa (Human cervix adenocarcinoma epithelial cell) treated with 100 nM Calyculin A for 30 minutes. Then the membrane was incubated with phosphatase

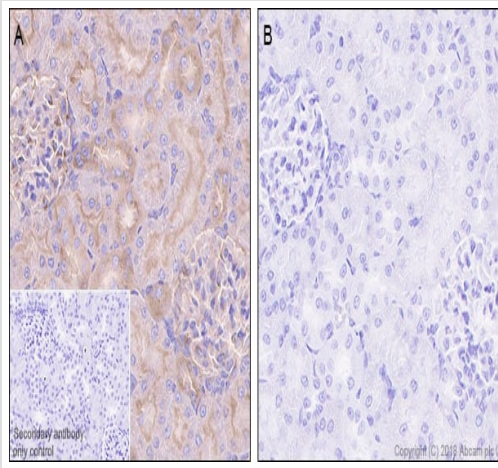
Lysates/proteins at 15 µg per lane.

### Secondary

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

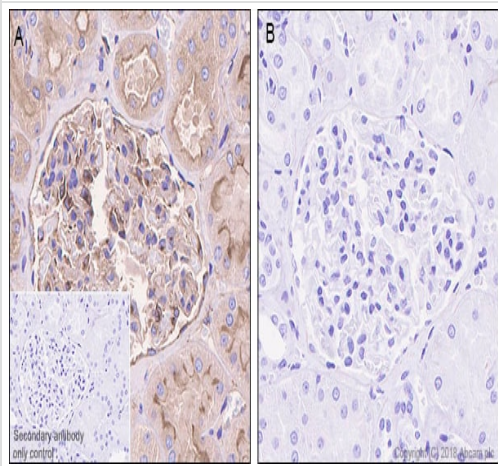
**Predicted band size:** 45 kDa

**Observed band size:** 51 kDa



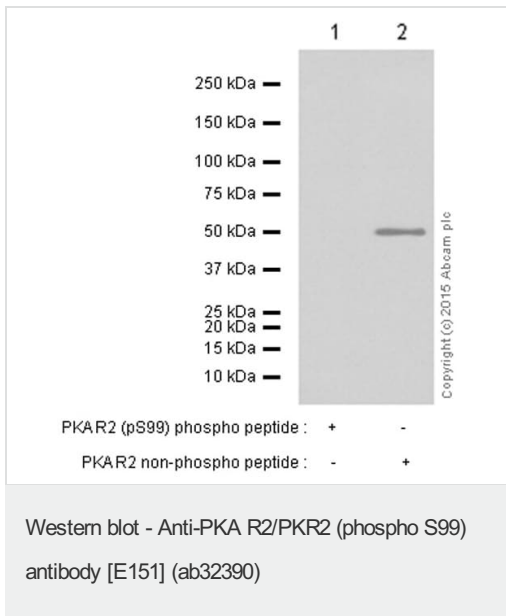
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKA R2/PKR2 (phospho S99) antibody [E151] (ab32390)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Rat kidney without Lambda Protein Phosphatase treatment (image A) and treated with Lambda Protein Phosphatase (image B). tissue sections labeling PKA R2/PKR2 with purified ab32390 at 1:500 dilution (0.75  $\mu\text{g/ml}$ ). Heat mediated antigen retrieval was performed Perform 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.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKA R2/PKR2 (phospho S99) antibody [E151] (ab32390)

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human kidney without Lambda Protein Phosphatase treatment (image A) and treated with Lambda Protein Phosphatase (image B). tissue sections labeling PKA R2/PKR2 with purified ab32390 at 1:500 dilution (0.75  $\mu\text{g/ml}$ ). Heat mediated antigen retrieval was performed Perform 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.



**All lanes :** Anti-PKA R2/PKR2 (phospho S99) antibody [E151] (ab32390) at 1/2000 dilution

**Lane 1 :** K562 whole cell lysate with PKA R2/PKR2 (pS99) phospho peptide

**Lane 2 :** K562 whole cell lysate with PKA R2/PKR2 non-phospho peptide

**Secondary**

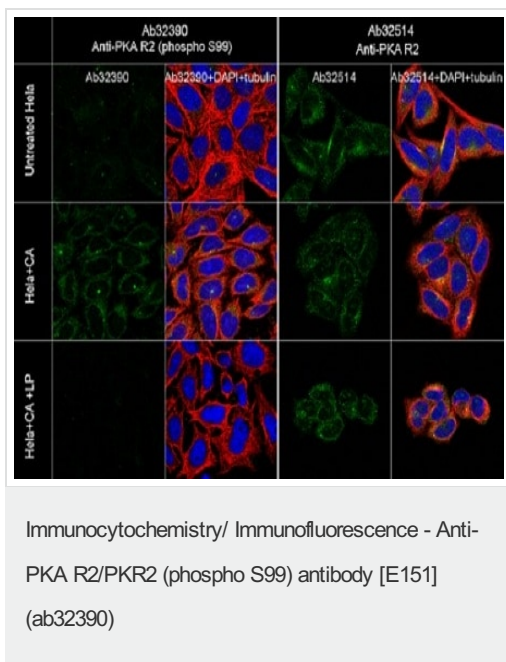
**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (ab97051) at 1/20000 dilution

**Predicted band size:** 45 kDa

**Observed band size:** 51 kDa

**Exposure time:** 3 minutes

Blocking and dilution buffer: 5% NFDm/TBST.



Cell line: HeLa (human cervix adenocarcinoma)

Target AbID: Ab32390 anti-PKA R2/PKR2 (phospho S99)

Target Secondary: ab150077 AlexaFluor®488 goat anti-rabbit

Counterstain AbID: ab7291 anti-Tubulin (mouse mAb)

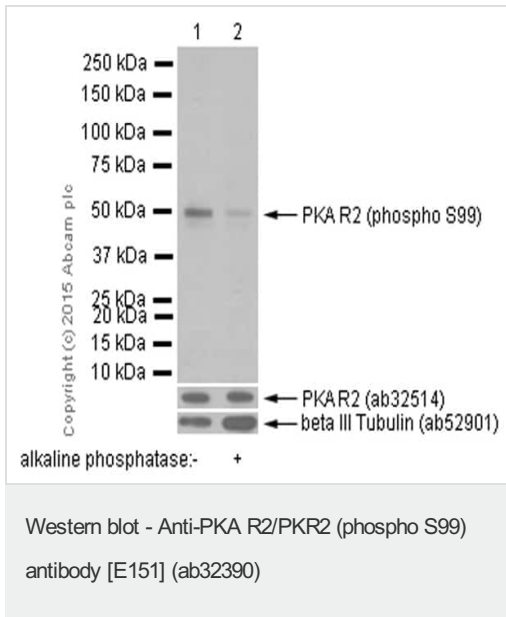
Target Secondary: ab150120 AlexaFluor®594 goat anti-mouse

Fixative: 4% PFA

Permeabilization: 0.1% Triton-X

Nuclear counter stain: DAPI

Other comments: Confocal image showed increased cytoplasmic staining after CA (100ng/ml, 10min) treatment on HeLa cells. The LP treatment decreased the increased cytoplasmic staining caused by CA. Ab32514 was used as a Pan control for ab32390. The results showed cytoplasmic staining on untreated, CA and CA+LP treated HeLa cells.



**All lanes :** Anti-PKA R2/PKR2 (phospho S99) antibody [E151] (ab32390) at 1/10000 dilution

**Lane 1 :** Untreated K562 whole cell lysate

**Lane 2 :** K562 whole cell lysate - treated with alkaline phosphatase

Lysates/proteins at 10 µg per lane.

### Secondary

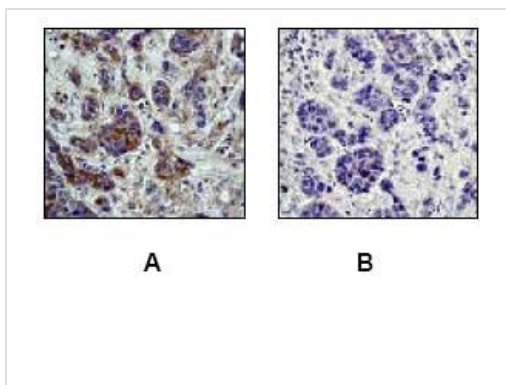
**All lanes :** Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

**Predicted band size:** 45 kDa

**Observed band size:** 51 kDa

**Exposure time:** 3 minutes

Blocking and dilution buffer: 5% NFDm/TBST.



ab32390, at a 1/250 dilution, staining (A) untreated (B) Phosphatase treated lymph node metastatic by immunohistochemistry, Paraffin embedded human tissue

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-PKA R2/PKR2 (phospho S99) antibody [E151] (ab32390)

### 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-PKA R2/PKR2 (phospho S99) antibody [E151]  
(ab32390)

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

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