abcam

Product datasheet

Anti-PKA R2/PKR2 (phospho S99) antibody [E151] - BSA and Azide free ab238951

Recombinant

RabMAb

5 Images

Overview

Product name Anti-PKA R2/PKR2 (phospho S99) antibody [E151] - BSA and Azide free

Description Rabbit monoclonal [E151] to PKA R2/PKR2 (phospho S99) - BSA and Azide free

Host species Rabbit

Specificity The antibody only detects PKA R2/PKR2 phosphorylated on Serine 99. Phosphoserine 99 in

Human corresponds to phosphoserine 96 in mouse.

The mouse and pig recommendation is based on the WB results. We do not guarantee IHC-P for

mouse and pig.

Tested applications Suitable for: WB, ICC/IF, IHC-P

Unsuitable for: Flow Cyt

Species reactivity Reacts with: Mouse, Rat, Human, Pig

Immunogen Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

Positive control 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

General notes ab238951 is the carrier-free version of <u>ab32390</u>.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for

increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar[®] Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar[®] is a trademark of Fluidigm Canada Inc.

This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

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- Improved sensitivity and specificity
- Long-term security of supply
- Animal-free production

For more information see here.

Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**[®] **patents**.

Properties

Form Liquid

Storage instructions Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal

Clone number E151 lsotype lgG

Applications

The Abpromise guarantee

Our Abpromise guarantee covers the use of ab238951 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		Use at an assay dependent concentration. Detects a band of approximately 51 kDa (predicted molecular weight: 45 kDa).
ICC/IF		Use at an assay dependent concentration.
IHC-P		Use at an assay dependent concentration. 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. See IHC antigen retrieval protocols.

Application notes

Is unsuitable for Flow Cyt.

Target

Function 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.

Tissue specificity 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.

Sequence similaritiesBelongs to the cAMP-dependent kinase regulatory chain family.

Contains 2 cyclic nucleotide-binding domains.

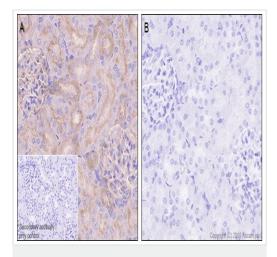
Post-translational modifications

Phosphorylated by the activated catalytic chain.

Cellular localization

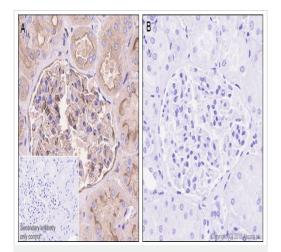
Cytoplasm. Cell membrane. Colocalizes with PJA2 in the cytoplasm and the cell membrane.

Images



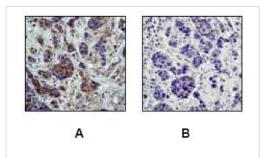
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-PKA R2/PKR2 (phospho S99) antibody [E151] - BSA and Azide free (ab238951)

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 µg/ml). Heat mediated antigen retrieval was performed 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 paraffinembedded sections) - Anti-PKA R2/PKR2 (phospho S99) antibody [E151] - BSA and Azide free (ab238951)

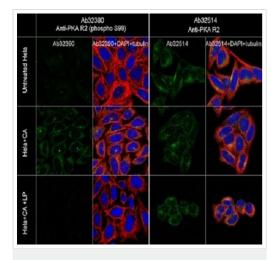
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of Human kidney without Lambda Protein Phosphatase treatment (image A) and treated with Lambda Protein Phosphatase (image B). tissue sections labeling PKA R2/PKR2 with purified ab32390 at 1:500 dilution (0.75 µg/ml). Heat mediated antigen retrieval was performed 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 paraffinembedded sections) - Anti-PKA R2/PKR2 (phospho S99) antibody [E151] - BSA and Azide free (ab238951)

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

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32390).



Immunocytochemistry/ Immunofluorescence - Anti-PKA R2/PKR2 (phospho S99) antibody [E151] -BSA and Azide free (ab238951) 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: $\underline{ab150120}$ AlexaFluor $^{\mathbb{R}}$ 594 goat anti-mouse

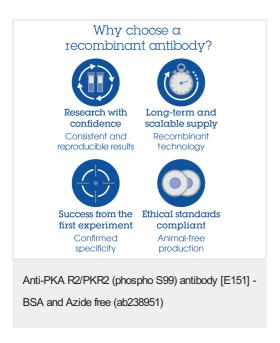
Fixative: 4% PFA

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.

This data was developed using the same antibody clone in a different buffer formulation containing PBS, BSA, glycerol, and sodium azide (ab32390).



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