

## Product datasheet

### Anti-CAMKIV antibody [EP2565AY] ab68218

Recombinant RabMAb

★★★★★ 1 Abreviews 1 References 5 Images

#### Overview

Product name	Anti-CAMKIV antibody [EP2565AY]
Description	Rabbit monoclonal [EP2565AY] to CAMKIV
Host species	Rabbit
Tested applications	<b>Suitable for:</b> ICC/IF, WB, IHC-P <b>Unsuitable for:</b> Flow Cyt (Intra)
Species reactivity	<b>Reacts with:</b> Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Human brain tissue sections, human ovarian adenocarcinoma tissue sections and SH SY5Y, Jurkat cell lysate. IF/ICC: HeLa cell line.
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. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	<p>pH: 7.2</p> <p>Preservative: 0.05% Sodium azide</p> <p>Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant</p>
Purity	Protein A purified

<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EP2565AY
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab68218 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

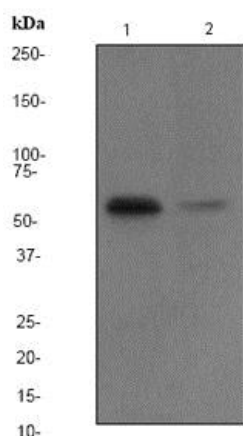
Application	Abreviews	Notes
ICC/IF		Use a concentration of 5 µg/ml.
WB		1/100000 - 1/500000. Detects a band of approximately 52 kDa (predicted molecular weight: 52 kDa).
IHC-P	★★★★★ (1)	1/250 - 1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

**Application notes** Is unsuitable for Flow Cyt (Intra).

## Target

<b>Function</b>	Calcium/calmodulin-dependent protein kinase belonging to a proposed calcium-triggered signaling cascade. May be involved in transcriptional regulation. May be involved in regulation of microtubule dynamics. In vitro, phosphorylates CREB1, CREBBP, PRM2, MEF2A, MEF2D and STMN1/OP18. May be involved in spermatogenesis. May play a role in the consolidation/retention of hippocampus-dependent long-term memory.
<b>Tissue specificity</b>	Expressed in epithelial ovarian cancer tissue.
<b>Sequence similarities</b>	Belongs to the protein kinase superfamily. CAMK Ser/Thr protein kinase family. CaMK subfamily. Contains 1 protein kinase domain.
<b>Post-translational modifications</b>	Autophosphorylated and phosphorylated by CAMKK1 and CAMKK2 (By similarity). Dephosphorylated by serine/threonine protein phosphatase 2A, probably on Thr-200.
<b>Cellular localization</b>	Cytoplasm. Nucleus. Substantial localization in certain neuronal nuclei. In spermatids associated with chromatin and nuclear matrix.

## Images



Western blot - Anti-CAMKIV antibody [EP2565AY] (ab68218)

**All lanes :** Anti-CAMKIV antibody [EP2565AY] (ab68218) at 1/1000000 dilution

**Lane 1 :** Jurkat cell lysate

**Lane 2 :** SH-SY5Y cell lysate

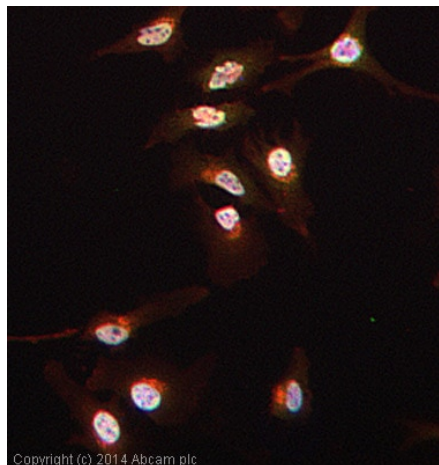
Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** HRP labelled goat anti-rabbit at 1/2000 dilution

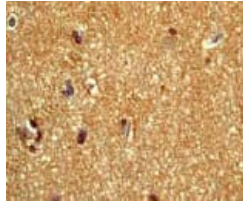
**Predicted band size:** 52 kDa

**Observed band size:** 52 kDa



Immunocytochemistry/ Immunofluorescence - Anti-CAMKIV antibody [EP2565AY] (ab68218)

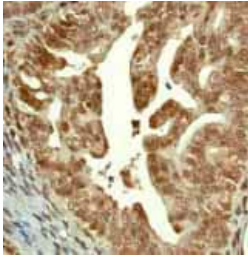
ab68218 stained HeLa cells. The cells were 4% formaldehyde fixed for 10 minutes at room temperature and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1hour at room temperature to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab68218 at 5µg/ml) overnight at +4°C. The secondary antibody (pseudo-colored green) was Goat Anti-Rabbit IgG H&L (Alexa Fluor® 488) preadsorbed (**ab150081**) used at a 1/1000 dilution for 1hour at room temperature. Alexa Fluor® 594 WGA was used to label plasma membranes (pseudo-colored red) at a 1/200 dilution for 1hour at room temperature. DAPI was used to stain the cell nuclei (pseudo-colored blue) at a concentration of 1.43µM for 1hour at room temperature.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CAMKIV antibody [EP2565AY] (ab68218)

ab68218 at 1/250-1/500 dilution staining CAMKIV in human brain tissue sections.

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



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-CAMKIV antibody [EP2565AY] (ab68218)

ab68218 at 1/250-1/500 dilution staining CAMKIV in human ovarian adenocarcinoma tissue sections.

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

#### 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-CAMKIV antibody [EP2565AY] (ab68218)

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

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