

**CAMKIV Antibody**  
**Rabbit mAb**  
**Catalog # AP91680**

**Specification**

**CAMKIV Antibody - Product Information**

Application **WB, IHC, FC, ICC, IP**  
Primary Accession [Q16566](#)  
Clonality **Monoclonal**

**Other Names**

CAM kinase 4; CAM kinase GR; CAM kinase IV; CAM kinase-GR; CaMK 4; CAMK GR; CaMK IV; Camk4; CaMKGR; IV; KCC4\_HUMAN;

Isotype **Rabbit IgG**  
Host **Rabbit**  
Calculated MW **51926 Da**

**CAMKIV Antibody - Additional Information**

Dilution **WB~~1:1000  
IHC~~1:100~500  
FC~~1:10~50  
ICC~~N/A  
IP~~N/A**

Purification **Affinity-chromatography**  
Immunogen **A synthesized peptide derived from human CAMKIV**

Description **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.**

Storage Condition and Buffer **Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.**

**CAMKIV Antibody - Protein Information**

**Name** CAMK4

**Synonyms** CAMK, CAMK-GR, CAMKIV

**Function**

Calcium/calmodulin-dependent protein kinase that operates in the calcium-triggered

CaMKK-CaMK4 signaling cascade and regulates, mainly by phosphorylation, the activity of several transcription activators, such as CREB1, MEF2D, JUN and RORA, which play pivotal roles in immune response, inflammation, and memory consolidation. In the thymus, regulates the CD4(+)/CD8(+) double positive thymocytes selection threshold during T-cell ontogeny. In CD4 memory T-cells, is required to link T-cell antigen receptor (TCR) signaling to the production of IL2, IFNG and IL4 (through the regulation of CREB and MEF2). Regulates the differentiation and survival phases of osteoclasts and dendritic cells (DCs). Mediates DCs survival by linking TLR4 and the regulation of temporal expression of BCL2. Phosphorylates the transcription activator CREB1 on 'Ser-133' in hippocampal neuron nuclei and contribute to memory consolidation and long term potentiation (LTP) in the hippocampus. Can activate the MAP kinases MAPK1/ERK2, MAPK8/JNK1 and MAPK14/p38 and stimulate transcription through the phosphorylation of ELK1 and ATF2. Can also phosphorylate in vitro CREBBP, PRM2, MEF2A and STMN1/OP18.

#### Cellular Location

Cytoplasm. Nucleus. Note=Localized in hippocampal neuron nuclei. In spermatids, associated with chromatin and nuclear matrix (By similarity).

#### Tissue Location

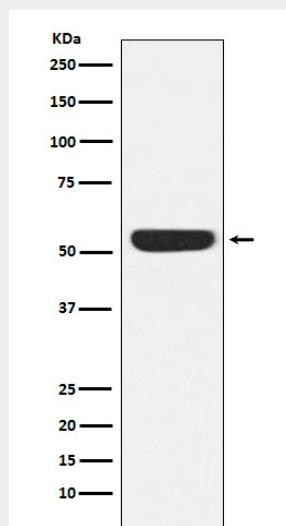
Expressed in brain, thymus, CD4 T-cells, testis and epithelial ovarian cancer tissue.

#### CAMKIV Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### CAMKIV Antibody - Images



Western blot analysis of CAMKIV expression in Jurkat cell lysate.