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CAMK4 antibody - N-terminal region
Rabbit Polyclonal Antibody
Catalog # AI14659

Specification

CAMK4 antibody - N-terminal region - Product Information

Application	**WB**
Primary Accession	Q16566
Other Accession	NM_001744, NP_001735
Reactivity	**Human, Mouse, Rat, Horse, Dog**
Predicted	**Human, Mouse, Rat, Pig, Chicken, Horse, Dog**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**52kDa KDa**

CAMK4 antibody - N-terminal region - Additional Information

Gene ID 814

Alias Symbol	**CaMK-GR, MGC36771, IV, caMK, CaMK IV**

Other Names
Calcium/calmodulin-dependent protein kinase type IV, CaMK IV, 2.7.11.17, CaM kinase-GR, CAMK4, CAMK, CAMK-GR, CAMKIV

Format
Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage
Add 50 ul of distilled water. Final anti-CAMK4 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions
CAMK4 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

CAMK4 antibody - N-terminal region - 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).

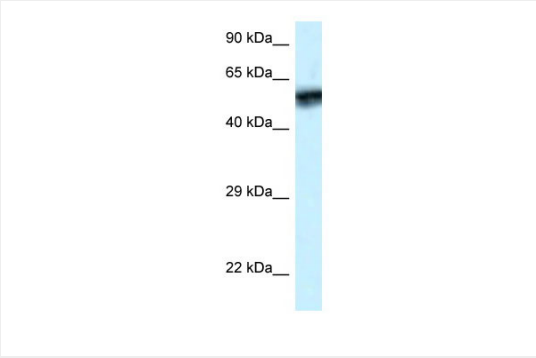
Tissue Location
Expressed in brain, thymus, CD4 T-cells, testis and epithelial ovarian cancer tissue.

CAMK4 antibody - N-terminal region - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CAMK4 antibody - N-terminal region - Images



WB Suggested Anti-CAMK4 Antibody Titration: 1.0 µg/ml
Positive Control: ACHN Whole Cell

CAMK4 antibody - N-terminal region - References

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Bland M.M.,et al.Gene 142:191-197(1994).
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