

Mouse Camk4 Antibody (C-term)
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP16069b

Specification

Mouse Camk4 Antibody (C-term) - Product Information

Application	WB,E
Primary Accession	P08414
Reactivity	Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit Ig
Calculated MW	52628
Antigen Region	405-432

Mouse Camk4 Antibody (C-term) - Additional Information

Other Names

Calcium/calmodulin-dependent protein kinase type IV, CaMK IV, CaM kinase-GR, Camk4

Target/Specificity

This Mouse Camk4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 405-432 amino acids from the C-terminal region of mouse Camk4.

Dilution

WB~~1:1000

Format

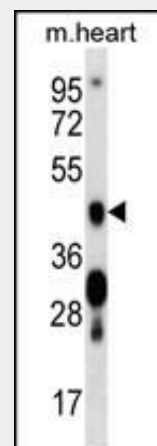
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

Mouse Camk4 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.



Mouse Camk4 Antibody (C-term) (Cat. #AP16069b) western blot analysis in mouse heart tissue lysates (35ug/lane). This demonstrates the Camk4 antibody detected the Camk4 protein (arrow).

Mouse Camk4 Antibody (C-term) - Background

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.

Mouse Camk4 Antibody (C-term) - Protein Information**Name** Camk4**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 (By similarity). May be involved in spermatogenesis.

Cellular Location

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

Tissue Location

Expressed in brain and testis.

Mouse Camk4 Antibody (C-term) - 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](#)