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Mouse Camk4 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP16069b

Specification

Mouse Camk4 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession P08414

Mouse Camk4 Antibody (C-term) Blocking Peptide - Additional Information

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

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Mouse Camk4 Antibody (C-term) Blocking Peptide - 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) Blocking Peptide - Protocols

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

- Blocking Peptides

Mouse Camk4 Antibody (C-term) Blocking Peptide - Images

Mouse Camk4 Antibody (C-term) Blocking Peptide - 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.