

**Mouse Camk2g Antibody (N-term) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP16068a****Specification**

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**Mouse Camk2g Antibody (N-term) Blocking Peptide - Product Information**Primary Accession [Q923T9](#)**Mouse Camk2g Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 12325**Other Names**

Calcium/calmodulin-dependent protein kinase type II subunit gamma, CaM kinase II subunit gamma, CaMK-II subunit gamma, Camk2g

**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 Camk2g Antibody (N-term) Blocking Peptide - Protein Information****Name** Camk2g**Function**

Calcium/calmodulin-dependent protein kinase that functions autonomously after Ca(2+)/calmodulin-binding and autophosphorylation, and is involved in sarcoplasmic reticulum Ca(2+) transport in skeletal muscle and may function in dendritic spine and synapse formation and neuronal plasticity (By similarity). In slow-twitch muscles, is involved in regulation of sarcoplasmic reticulum (SR) Ca(2+) transport and in fast-twitch muscle participates in the control of Ca(2+) release from the SR through phosphorylation of the ryanodine receptor-coupling factor triadin (By similarity). In the central nervous system, it is involved in the regulation of neurite formation and arborization (PubMed:<a href="http://www.uniprot.org/citations/30184290" target="\_blank">30184290</a>). It may participate in the promotion of dendritic spine and synapse formation and maintenance of synaptic plasticity which enables long-term potentiation (LTP) and hippocampus-dependent learning (PubMed:<a href="http://www.uniprot.org/citations/30184290" target="\_blank">30184290</a>). In response to interferon-gamma (IFN-gamma) stimulation, catalyzes phosphorylation of STAT1, stimulating the JAK- STAT signaling pathway (PubMed:<a href="http://www.uniprot.org/citations/11972023" target="\_blank">11972023</a>).

**Cellular Location**

Sarcoplasmic reticulum membrane; Peripheral membrane protein; Cytoplasmic side

### **Mouse Camk2g Antibody (N-term) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)

### **Mouse Camk2g Antibody (N-term) Blocking Peptide - Images**

### **Mouse Camk2g Antibody (N-term) Blocking Peptide - Background**

CaM-kinase II (CAMK2) is a prominent kinase in the central nervous system that may function in long-term potentiation and neurotransmitter release.

### **Mouse Camk2g Antibody (N-term) Blocking Peptide - References**

Martinez-Pena y Valenzuela, I., et al. J. Neurosci. 30(37):12455-12465(2010)Jin, X.L., et al. Biol. Reprod. 82(2):459-468(2010)Backs, J., et al. Proc. Natl. Acad. Sci. U.S.A. 107(1):81-86(2010)Chang, H.Y., et al. Development 136(24):4077-4081(2009)Sag, C.M., et al. Circ Heart Fail 2(6):664-675(2009)