### **Product Datasheet**

# CaMK4 (Phospho-Thr196/200) Antibody

Catalog No: #11981

Package Size: #11981-1 50ul #11981-2 100ul



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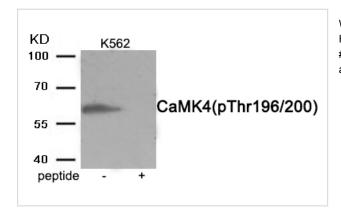
Product Name	CaMK4 (Phospho-Thr196/200) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates.
	Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho
	specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Applications	WB;IHC;IF
Species Reactivity	Hu Ms Rt
Specificity	Phospho-CaMKIV (T200) Polyclonal Antibody detects endogenous levels of CaMKIV protein only when
	phosphorylated at Thr196/200.
Immunogen Type	Peptide-KLH
Immunogen Description	The antiserum was produced against synthesized peptide derived from human CaMK4 around the
	phosphorylation site of Thr196/200.
Target Name	CaMK4
Modification	Phospho
Other Names	CAM kinase-GR; CAMK4; CaMK IV; Calspermin; KCC4
Accession No.	Swiss-Prot#: Q16566; NCBI Gene#: 814; NCBI Protein#: NP_001735.1
SDS-PAGE MW	60kd
Concentration	1.0mg/ml
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Storage	Store at -20°C/1 year

## **Application Details**

WB 1:500 - 1:2000. IHC 1:100 - 1:300.

IF 1:200 - 1:1000.

## **Images**



Western blot analysis of extracts from K562 cells treated with H2O2 using Phospho-CaMK4 (Thr196/200) antibody #11981.The lane on the right is treated with the antigen-specific peptide.

## Background

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).

Oury F, et al. (2010)Genes Dev 24, 2330-42. Dias WB, Cheung WD, Wang Z, Hart GW (2009) J Biol Chem 284, 21327-37. Chow FA, Anderson KA, Noeldner PK, Means AR (2005)J Biol Chem 280, 20530-8.

Note: This product is for in vitro research use only and is not intended for use in humans or animals.