

## CaMK4 (Phospho-Thr196/200) Antibody

Catalog No: #11981

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

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

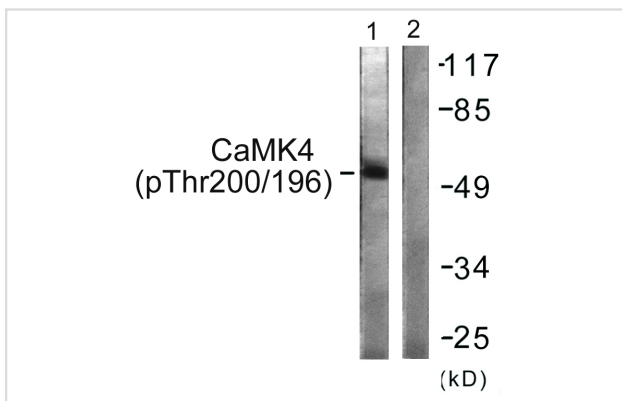
## Description

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 chromatography using non-phosphopeptide.
Applications	WB
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
Uniprot	Q16566
GeneID	814;
SDS-PAGE MW	60kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C/1 year

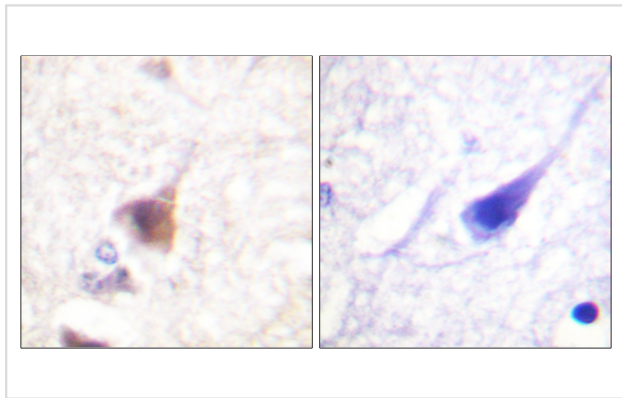
## Application Details

Western blotting: 1:500~1:1000

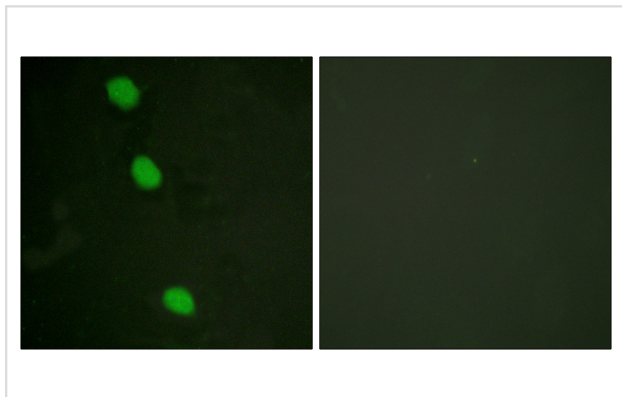
## Images



Western blot analysis of lysates from K562 cells treated with H<sub>2</sub>O<sub>2</sub> 100uM 30', using CaMK4 (Phospho-Thr196/200) Antibody. The lane on the right is blocked with the phospho peptide.



Immunohistochemistry analysis of paraffin-embedded human brain, using CaMK4 (Phospho-Thr196/200) Antibody. The picture on the right is blocked with the phospho peptide.



Immunofluorescence analysis of HeLa cells, using CaMK4 (Phospho-Thr196/200) Antibody. The picture on the right is blocked with the phospho 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<sup>+</sup>/CD8<sup>+</sup> 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