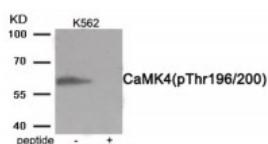




CaMK4 (phospho Thr196/200) Antibody

CATALOG NUMBER: 80-030



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

Specifications

SPECIES REACTIVITY:	Human, Mouse, Rat
TESTED APPLICATIONS:	WB
APPLICATIONS:	Western Blot: 1:500~1:1000
PREDICTED MOLECULAR WEIGHT:	60 kDa
SPECIFICITY:	The antibody detects endogenous level of CaMK4 only when phosphorylated at threonine196/threonine 200.
IMMUNOGEN:	CaMK4 (phospho Thr196/200) antibody was raised against a peptide sequence around phosphorylation site of threonine 200 (M-K-T (p)-V-C) derived from Human CaMK4 or threonine 196 (M-K-T (p)-V-C) derived from Mouse CaMK4.
HOST SPECIES:	Rabbit

Properties

PURIFICATION:	Antibodies were purified by affinity-chromatography using epitope-specific peptide.
PHYSICAL STATE:	Liquid
BUFFER:	Antibody supplied in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
CONCENTRATION:	1 mg/mL
STORAGE CONDITIONS:	Store antibody at -20°C for up to one year.
CLONALITY:	Polyclonal
ISOTYPE:	IgG
CONJUGATE:	Unconjugated

Additional Info

ALTERNATE NAMES:	CAM kinase-GR, CAMK4, CaMK IV, Calspermin, KCC4
ACCESSION NO.:	NP_001735.1

PROTEIN GI NO.:	2499586
OFFICIAL SYMBOL:	CAMK4
GENE ID:	814

Background

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).

REFERENCES: 1) 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.

FOR RESEARCH USE ONLY

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