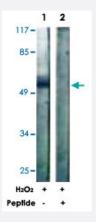


CAMK4 polyclonal antibody

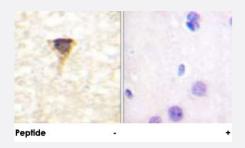
Catalog # PAB18312 Size 100 ug

Applications



Western Blot (Cell lysate)

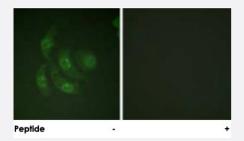
Western blot analysis of extracts from K-562 cells, treated with H_2O_2 (100 uM, 30 mins), using CAMK4 polyclonal antibody (Cat # PAB18312). Peptide "+" means "peptide blocking".



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

Immunohistochemical analysis of paraffin-embedded human brain tissue using CAMK4 polyclonal antibody (Cat # PAB18312).

Peptide "+" means "peptide blocking".



Immunofluorescence

Immunofluorescence analysis of HepG2 cells, using CAMK4 polyclonal antibody (Cat # PAB18312).

Peptide "+" means "peptide blocking".

Specification

Product Description

Rabbit polyclonal antibody raised against synthetic peptide of CAMK4.



Product Information

Immunogen	A synthetic peptide corresponding to residues surrounding T196/200 of human CAMK4.
Host	Rabbit
Reactivity	Human, Mouse, Rat
Specificity	This antibody is specific to CAMK4.
Form	Liquid
Purification	Affinity purification
Concentration	1 mg/mL
Recommend Usage	Western Blot (1:500-1:1000) Immunohistochemistry (1:50-1:100) Immunofluorescence (1:500-1:1000) ELISA (1:5000) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS, 150mM NaCl, pH 7.4 (50% glycerol, 0.02% sodium azide)
Storage Instruction	Store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

Western Blot (Cell lysate)

Western blot analysis of extracts from K-562 cells, treated with H_2O_2 (100 uM, 30 mins), using CAMK4 polyclonal antibody (Cat # PAB18312).

Peptide "+" means "peptide blocking".

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded human brain tissue using CAMK4 polyclonal antibody (Cat # PAB18312). Peptide "+" means "peptide blocking".

Immunofluorescence

Immunofluorescence analysis of HepG2 cells, using CAMK4 polyclonal antibody (Cat # PAB18312). Peptide "+" means "peptide blocking".

Enzyme-linked Immunoabsorbent Assay



Gene Info — CAMK4	
Entrez GenelD	814
Protein Accession#	Q16566
Gene Name	CAMK4
Gene Alias	CaMK-GR, MGC36771
Gene Description	calcium/calmodulin-dependent protein kinase IV
Omim ID	<u>114080</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	The product of this gene belongs to the serine/threonine protein kinase family, and to the Ca(2+)/c almodulin-dependent protein kinase subfamily. This enzyme is a multifunctional serine/threonine p rotein kinase with limited tissue distribution, that has been implicated in transcriptional regulation in lymphocytes, neurons and male germ cells. [provided by RefSeq
Other Designations	CAM kinase IV CAM kinase- GR brain Ca(2+)-calmodulin-dependent protein kinase type IV brain Ca++-calmodulin-dependent protein kinase type IV calcium/calmodulin-dependent protein kinase type IV catalytic chain

Publication Reference

• Calmodulin-dependent protein kinase IV regulates hematopoietic stem cell maintenance.

Kitsos CM, Sankar U, Illario M, Colomer-Font JM, Duncan AW, Ribar TJ, Reya T, Means AR. Journal of Biological Chemistry 2005 Sep; 280(39):33101.

• Spermatogenesis and the regulation of Ca(2+)-calmodulin-dependent protein kinase IV localization are not dependent on calspermin.

Wu JY, Ribar TJ, Means AR.

Molecular and Cellular Biology 2001 Sep; 21(17):6066.

Application: IHC-P, WB-Ti, Mouse, Mouse testes, Mouse seminiferous tubules, Mouse thymus

• Female fertility is reduced in mice lacking Ca2+/calmodulin-dependent protein kinase IV.

Wu JY, Gonzalez-Robayna IJ, Richards JS, Means AR.

Endocrinology 2000 Dec; 141(12):4777.

Application: ICC, WB-Ce, Rat, Granulosa cells



Pathway

- Calcium signaling pathway
- Long-term potentiation
- Neurotrophin signaling pathway

Disease

- Alcoholism
- Azoospermia
- Genetic Predisposition to Disease
- Narcolepsy
- Oligospermia
- Tobacco Use Disorder