

CAMKIV Rabbit mAb

Catalog No: #49872

Package Size: #49872-1 50ul #49872-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

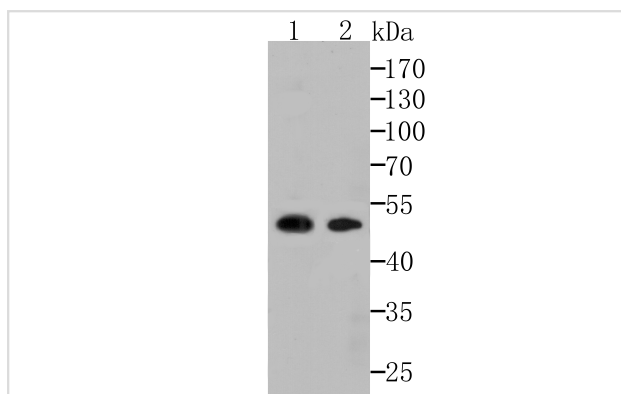
Description

Product Name	CAMKIV Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	JB33-13
Purification	ProA affinity purified
Applications	WB,ICC,IF,IHC,FC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	Recombinant protein corresponding to the C-terminus of human CAMKIV.
Other Names	Brain Ca(2+) calmodulin dependent protein kinase type 4 antibody Brain Ca(2+) calmodulin dependent protein kinase type IV antibody Brain Ca ⁺⁺ -calmodulin dependent protein kinase type IV antibody Calcium / calmodulin dependent protein kinase type 4 catalytic chain antibody Calcium / calmodulin dependent protein kinase type IV catalytic chain antibody Calcium/calmodulin dependent protein kinase IV antibody Calcium/calmodulin dependent protein kinase type IV antibody Calcium/calmodulin-dependent protein kinase type IV antibody CAM kinase 4 antibody CAM kinase GR antibody CAM kinase IV antibody CAM kinase-GR antibody CaMK 4 antibody CAMK GR antibody CaMK IV antibody Camk4 antibody CaMKGR antibody IV antibody KCC4_HUMAN antibody MGC36771 antibody
Accession No.	Swiss-Prot#:Q16566
Uniprot	Q16566
GeneID	814;
Calculated MW	52 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

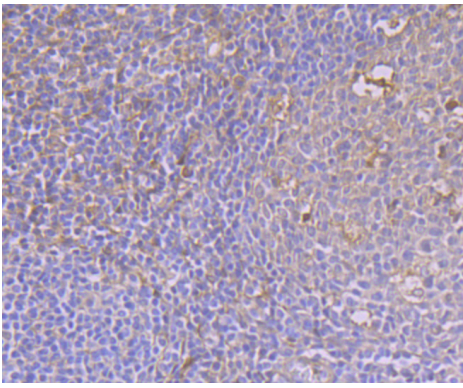
Application Details

WB: 1:500-1:2,000 IHC: 1:50-1:200 ICC: 1:50-1:200FC: 1:50-1:100

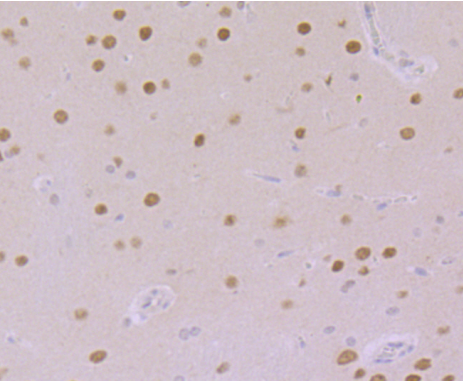
Images



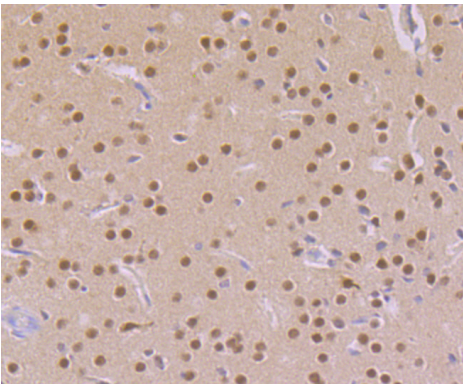
Western blot analysis of CAMKIV on mouse brain and rat brain lysates using anti-CAMKIV antibody at 1/1,000 dilution.



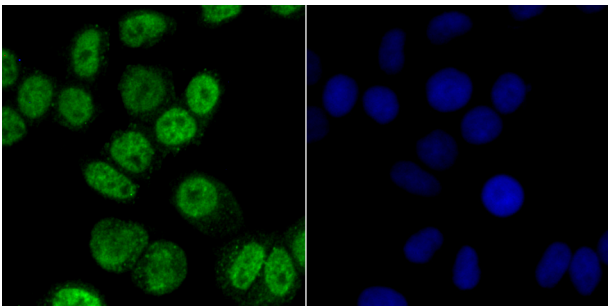
Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-CAMKIV antibody. Counter stained with hematoxylin.



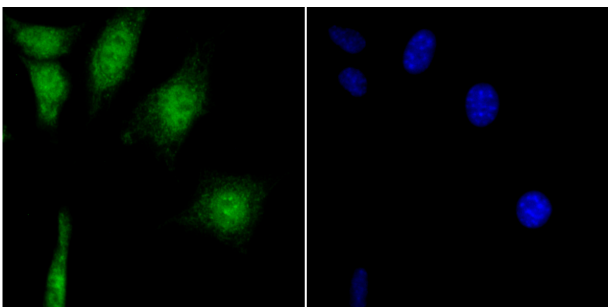
Immunohistochemical analysis of paraffin-embedded rat brain tissue using anti-CAMKIV antibody. Counter stained with hematoxylin.



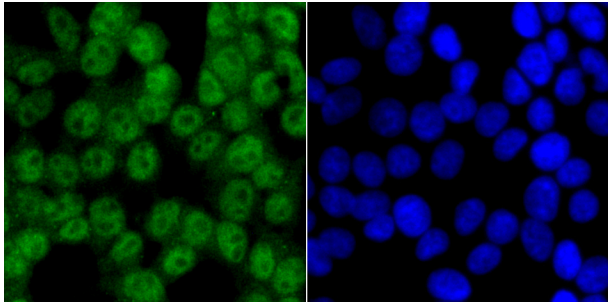
Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-CAMKIV antibody. Counter stained with hematoxylin.



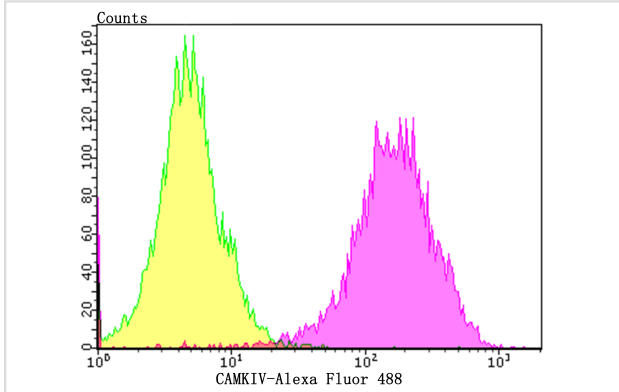
ICC staining CAMKIV in HeLa cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining CAMKIV in SH-SY-5Y cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining CAMKIV in 293T cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



Flow cytometric analysis of SH-SY-5Y cells with CAMKIV antibody at 1/100 dilution (yellow) compared with an unlabelled control (cells without incubation with primary antibody; purple). Alexa Fluor 488-conjugated goat anti-rabbit IgG was used as the secondary antibody.

Background

The Ca²⁺/calmodulin-dependent protein kinases (CaM kinases) comprise a structurally related subfamily of serine/threonine kinases which include CaMKI, CaMKII and CaMKIV. CaMKII is a ubiquitously expressed serine/threonine protein kinase that is activated by Ca²⁺ and calmodulin (CaM) and has been implicated in regulation of the cell cycle and transcription. There are four CaMKII isozymes designated α , β , γ and δ , which may or may not be co-expressed in the same tissue type. CaMKIV is stimulated by Ca²⁺ and CaM but also requires phosphorylation by a CaMK for full activation. Stimulation of the T cell receptor CD3 signaling complex with an anti-CD3 monoclonal antibody leads to a 10-40 fold increase in CaMKIV activity. An additional kinase, CaMKK, functions to activate CaMKI through the specific phosphorylation of the regulatory Threonine residue at position 177.

References

Note: This product is for in vitro research use only