

CaMK α Rabbit mAb

Catalog No: #48831

Package Size: #48831-1 50ul #48831-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

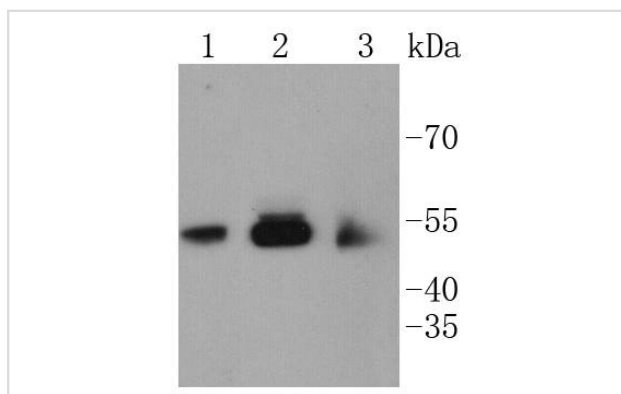
Description

Product Name	CaMK α Rabbit mAb
Host Species	Recombinant Rabbit
Clonality	Monoclonal antibody
Clone No.	SU03-57
Purification	ProA affinity purified
Applications	WB, ICC/IF, IHC
Species Reactivity	Hu, Ms, Rt
Immunogen Description	recombinant protein
Other Names	Calcium/calmodulin dependent protein kinase II alpha antibody Calcium/calmodulin dependent protein kinase II beta antibody Calcium/calmodulin dependent protein kinase II delta antibody Calcium/calmodulin dependent protein kinase II gamma antibody Calcium/calmodulin-dependent protein kinase type II subunit alpha antibody CaM kinase II alpha antibody CaM kinase II antibody CaM kinase II beta antibody CaM kinase II delta antibody CaM kinase II gamma antibody CaM kinase II subunit alpha antibody CaMK-II subunit alpha antibody CAMK2 antibody Camk2a antibody CAMK2B antibody CAMK2D antibody CAMK2G antibody CAMKA antibody KCC2A_HUMAN antibody
Accession No.	Swiss-Prot#:Q13554
Uniprot	Q13554
GeneID	816;
Calculated MW	54 kDa
Formulation	1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200 ICC: 1:50-1:200

Images



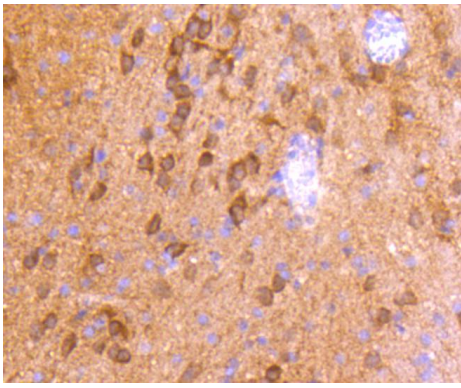
Western blot analysis of CaMK α on different lysates using anti-CaMK α antibody at 1/1,000 dilution.

Positive control:

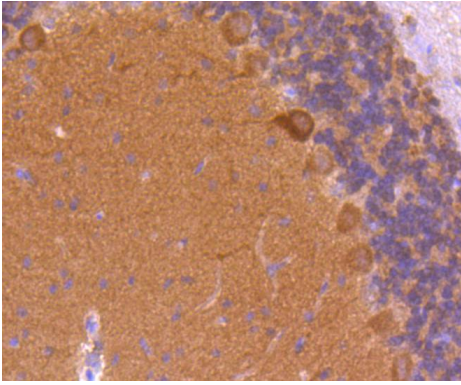
Lane 1: SH-SY-5Y

Lane 2: PC-12

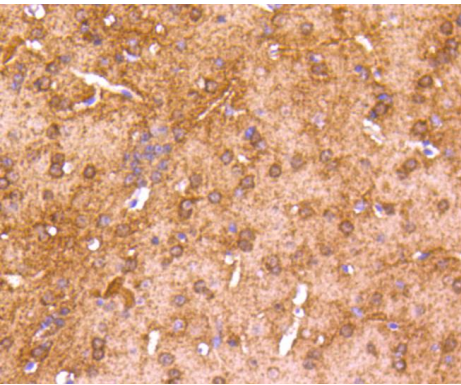
Lane 3: SHG-44



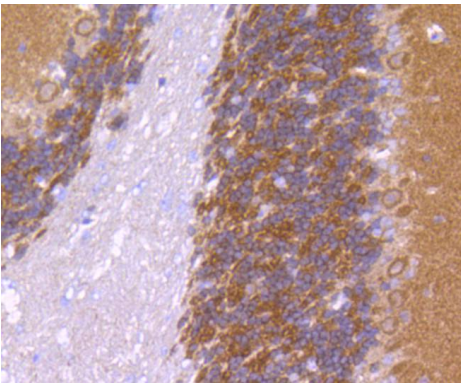
Immunohistochemical analysis of paraffin-embedded rat brain tissue using anti-CaMK α 2 antibody. Counter stained with hematoxylin.



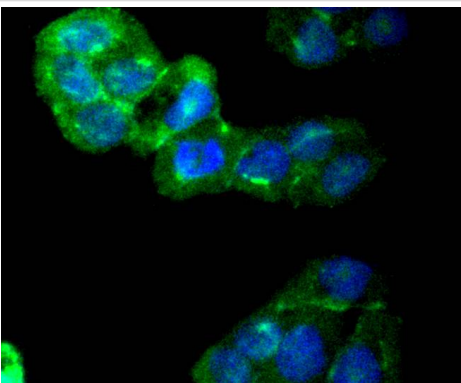
Immunohistochemical analysis of paraffin-embedded rat cerebellum tissue using anti-CaMK α 2 antibody. Counter stained with hematoxylin.



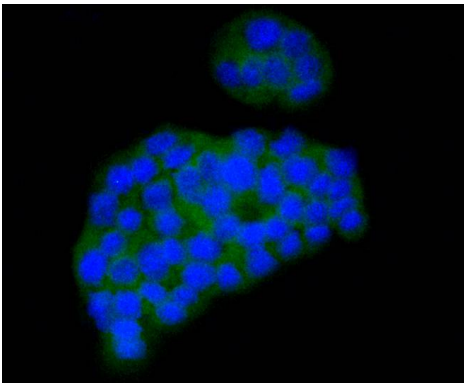
Immunohistochemical analysis of paraffin-embedded mouse brain tissue using anti-CaMK α 2 antibody. Counter stained with hematoxylin.



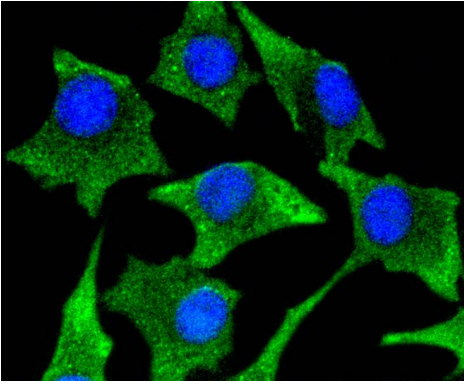
Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue using anti-CaMK α 2 antibody. Counter stained with hematoxylin.



ICC staining CaMK α 2 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 CaMKII α in PC-12 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining CaMKII α in SHG-44 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

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