

For Research Use Only

CaMKII alpha Monoclonal antibody

Catalog Number: 66843-1-Ig 4 Publications



Basic Information

Catalog Number: 66843-1-Ig	GenBank Accession Number: BC040457	Purification Method: Protein A purification
Concentration: 1000 ug/ml	GeneID (NCBI): 815	CloneNo.: 1E3B3
Source: Mouse	UNIPROT ID: Q9UQM7	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 IF/ICC 1:200-1:800
Isotype: IgG1	Full Name: calcium/calmodulin-dependent protein kinase II alpha	
Immunogen Catalog Number: AG4736	Calculated MW: 478 aa, 54 kDa	
	Observed MW: 45-60 kDa	

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA	Positive Controls:
Cited Applications: WB, IF	WB : pig brain tissue, pig cerebellum tissue, rat brain tissue, rat cerebellum tissue, mouse brain tissue, mouse cerebellum tissue, rabbit brain tissue, rat brain tissue
Species Specificity: human, mouse, rat, pig	IHC : mouse brain tissue, human renal cell carcinoma tissue
Cited Species: human, mouse, rat	IF/ICC : SH-SY5Y cells,
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0	

Background Information

CaM-kinase II (CAMK2) is a prominent kinase in the central nervous system that may function in long-term potentiation and neurotransmitter release. It is a member of the NMDAR signaling complex in excitatory synapses it may regulate NMDAR-dependent potentiation of the AMPAR and synaptic plasticity. This antibody can recognize all the members of the CAMK2 family.

Notable Publications

Author	Pubmed ID	Journal	Application
Ting-Ting Chen	33714957	Aging (Albany NY)	WB
Weili Wang	39896347	Noncoding RNA Res	WB
Yan Sun	38852473	Phytomedicine	WB

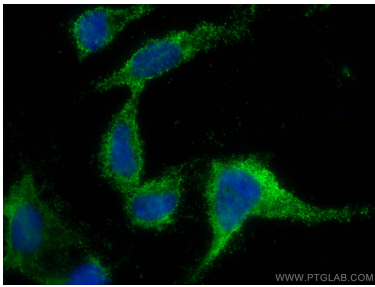
Storage

Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

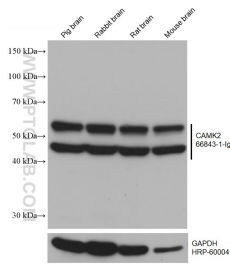
For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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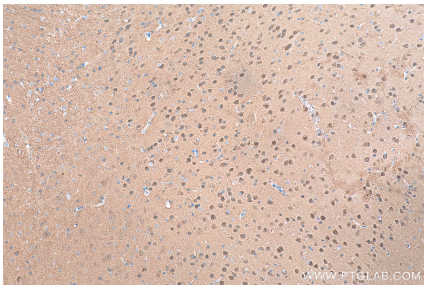
Selected Validation Data



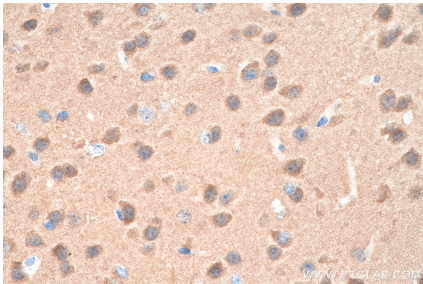
Immunofluorescent analysis of (4% PFA) fixed SH-SY5Y cells using CAMK2 antibody (66843-1-Ig, Clone: 1E3B3) at dilution of 1:400 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).



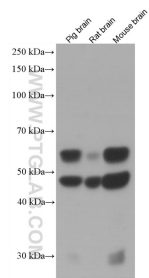
Various lysates were subjected to SDS PAGE followed by western blot with 66843-1-Ig (CAMK2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 66843-1-Ig (CAMK2 antibody) at dilution of 1:1000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 66843-1-Ig (CAMK2 antibody) at dilution of 1:1000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 66843-1-Ig (CAMK2A antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.