

For Research Use Only

CaMKII alpha Monoclonal antibody

Catalog Number: 66843-1-Ig **3 Publications**



Basic Information

Catalog Number: 66843-1-Ig	GenBank Accession Number: BC040457	Purification Method: Protein A purification
Size: 150ul, Concentration: 1300 ug/ml by 815 Nanodrop and 1000 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): UNIPROT ID: Q9UQM7	CloneNo.: 1E3B3
Source: Mouse	Full Name: calcium/calmodulin-dependent protein kinase II alpha	Recommended Dilutions: WB 1:5000-1:50000 IHC 1:500-1:2000 IF/ICC 1:200-1:800
Isotype: IgG1	Calculated MW: 478 aa, 54 kDa	
Immunogen Catalog Number: AG4736	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: 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
Yan Sun	38852473	Phytomedicine	WB
Yuting Jiang	38636611	Brain Res Bull	IF

Storage

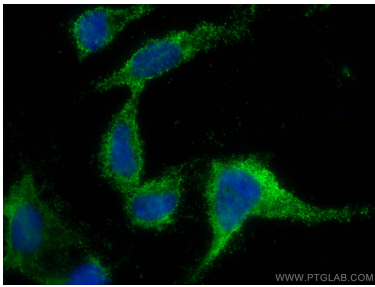
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

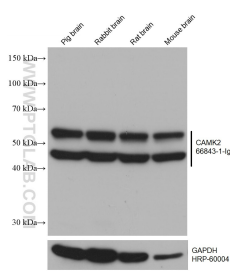
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

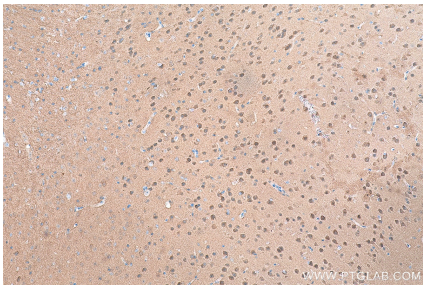
Selected Validation Data



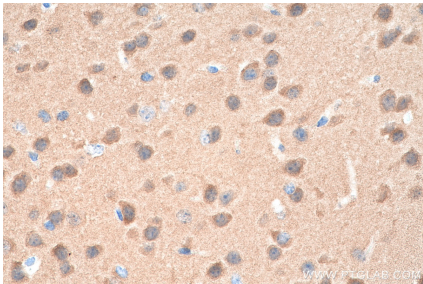
Immunofluorescent analysis of (4% PFA) fixed SH-SY5Y cells using CAMK2 antibody (66843-1-Ig, Clone: 1E3B3) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Mouse IgG(H+L).



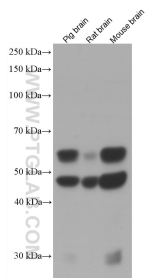
Various lysates were subjected to SDS PAGE followed by western blot with 66843-1-Ig (CAMK2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading control.



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.