

For Research Use Only

CaMKII alpha Polyclonal antibody

Catalog Number: 13730-1-AP

27 Publications



Basic Information

Catalog Number:

13730-1-AP

Size:

150ul, Concentration: 400 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG4745

GenBank Accession Number:

BC040457

GeneID (NCBI):

815

UNIPROT ID:

Q9UQM7

Full Name:

calcium/calmodulin-dependent protein kinase II alpha

Calculated MW:

478 aa, 54 kDa

Observed MW:

45-60 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:5000

IHC 1:50-1:500

IF-P 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF-P, ELISA

Cited Applications:

WB, IF

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, pig, camel

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : mouse brain tissue, rat brain tissue

IHC : human renal cell carcinoma tissue,

IF-P : mouse brain tissue,

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
Yitian Lu	36071475	J Neuroinflammation	WB
Mohammad Ejaz Ahmed	27604243	J Mol Neurosci	WB
Wen Zhang	36265757	Neuroscience	WB

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

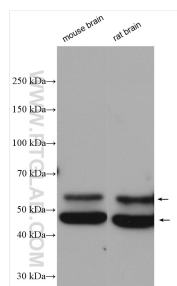
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

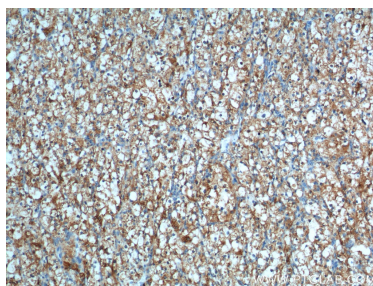
E: proteintech@ptglab.com
W: ptglab.com

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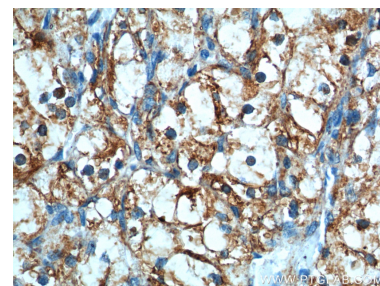
Selected Validation Data



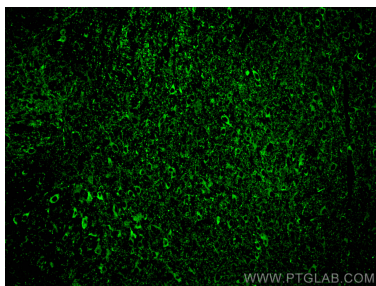
Various lysates were subjected to SDS PAGE followed by western blot with 13730-1-AP (CAMK2 antibody) at dilution of 1:2500 incubated at room temperature for 1.5 hours.



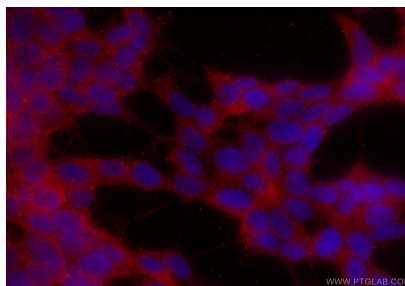
Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 13730-1-AP (CAMK2 antibody at dilution of 1:200 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human renal cell carcinoma tissue slide using 13730-1-AP (CAMK2 antibody at dilution of 1:200 (under 40x lens).



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using CaMKII alpha antibody (13730-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (-20°C Ethanol) fixed SH-SY5Y cells using CaMKII alpha antibody (13730-1-AP) at dilution of 1:200 and CoraLite®594-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-4).