

For Research Use Only

CAMK2B Polyclonal antibody

Catalog Number: 55218-1-AP



Basic Information

Catalog Number:

55218-1-AP

Size:

150ul, Concentration: 400 ug/ml by Nanodrop and 280 ug/ml by Bradford method using BSA as the standard;

Source:

Rabbit

Isotype:

IgG

GenBank Accession Number:

NM_001220

GeneID (NCBI):

816

UNIPROT ID:

Q13554

Full Name:

calcium/calmodulin-dependent protein kinase II beta

Calculated MW:

73 kDa

Observed MW:

55-60 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:1000-1:6000

IHC: 1:20-1:200

IF/ICC: 1:20-1:200

Applications

Tested Applications:

WB, IHC, IF/ICC, ELISA

Species Specificity:

human, mouse, rat

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 : A549 cells, Hela cells, mouse brain tissue, mouse cerebellum tissue

IHC : human skeletal muscle tissue, human brain tissue

IF/ICC : HEK-293 cells,

Background Information

CaMKII beta (Calcium/calmodulin-dependent protein kinase type II subunit beta), also named as CAMK2B, CAM2 or CAMKB, belongs to the protein kinase superfamily, CAMK Ser/Thr protein kinase family and CaMK subfamily. It is a member of the NMDAR signaling complex in excitatory synapses, it may regulate NMDAR-dependent potentiation of the AMPAR and synaptic plasticity. It plays a distinct role in the induction of anergy in T lymphocytes, by differential regulation of IL10 and IL2 gene transcription suggesting MEF2A as a molecular target which can integrate different calcium signals (PMID:22578382). CAMK2B has 8 isoforms produced by alternative splicing with the molecular weight 50-73 kDa. This antibody is specific to CAMK2B and can recognize all the isoforms except isoform 7.

Storage

Storage:

Store at -20°C.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

***** 20ul sizes contain 0.1% BSA**

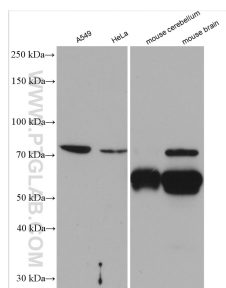
For technical support and original validation data for this product please contact:

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

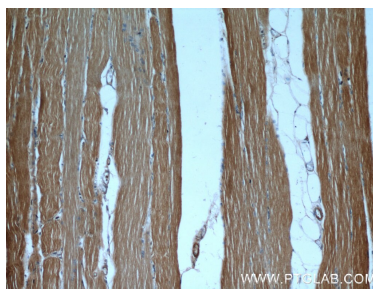
E: proteintech@ptglab.com
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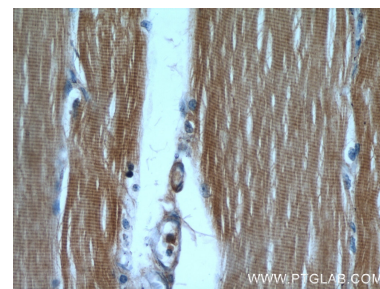
Selected Validation Data



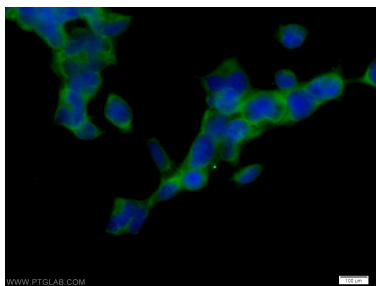
Various lysates were subjected to SDS PAGE followed by western blot with 55218-1-AP (CaMKII beta-Specific antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human skeletal muscle using 55218-1-AP (CaMKII beta antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human skeletal muscle using 55218-1-AP (CaMKII beta antibody) at dilution of 1:50 (under 40x lens).



Immunofluorescent analysis of HEK-293 cells using 55218-1-AP (CaMKII beta antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).