

For Research Use Only

CaMKII beta-Specific Polyclonal ANTIBODY



Catalog Number: 55218-1-AP

Basic Information

Catalog Number: 55218-1-AP	GenBank Accession Number: NM_001220	Purification Method: Antigen affinity purification
Size: 150UL, Concentration: 280 µg/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 816	Recommended Dilutions: WB 1:500-1:3000 IHC 1:20-1:200 IF 1:20-1:200
Source: Rabbit	Full Name: calcium/calmodulin-dependent protein kinase II beta	
Isotype: IgG	Calculated MW: 73 kDa	
	Observed MW: 55-60 kDa	

Applications

Tested Applications:

IF, IHC, WB, 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: mouse brain tissue,

IHC: human skeletal muscle tissue, human brain tissue

IF: 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 pH 7.3.

Aliquoting is unnecessary for -20°C storage

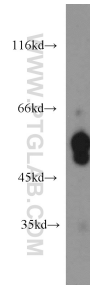
For technical support and original validation data for this product please contact:

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

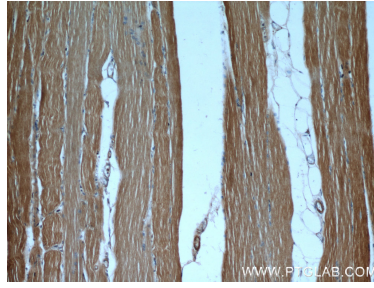
E: proteintech@ptglab.com
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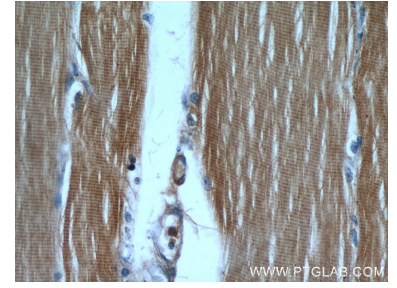
Selected Validation Data



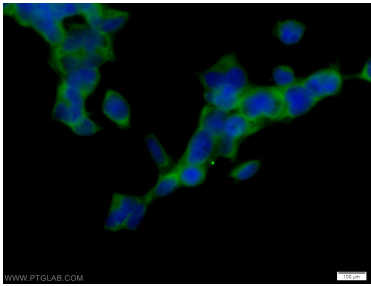
mouse brain tissue were subjected to SDS PAGE followed by western blot with 55218-1-AP (CaMKII beta antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



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).