

For Research Use Only

CaMKII Gamma Polyclonal antibody

Catalog Number: 12666-2-AP

Featured Product

27 Publications



Basic Information

Catalog Number:

12666-2-AP

Size:

150ul, Concentration: 450 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG3348

GenBank Accession Number:

BC034044

GeneID (NCBI):

818

UNIPROT ID:

Q13555

Full Name:

calcium/calmodulin-dependent protein kinase II gamma

Calculated MW:

527 aa, 59 kDa

Observed MW:

59 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:1000-1:4000

IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC 1:50-1:500

IF/ICC 1:200-1:800

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human, mouse, rat

Cited Species:

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 : SMMC-7721 cells, human brain tissue

IP : mouse heart tissue,

IHC : mouse heart tissue, human pancreas cancer tissue

IF/ICC : HepG2 cells,

Background Information

CaMKII gamma, also named CAMKG or CAMK2G, belongs to the protein kinase superfamily, CAMK Ser/Thr protein kinase family, and CaMK subfamily. CAMK2 is a prominent kinase in the central nervous system that may function in long-term potentiation and neurotransmitter release. CAMK2G is expressed in human beta cells as a candidate gene for Type II (non-insulin-dependent) diabetes mellitus. Some studies can be used to assess the role of CAMK2G in the susceptibility to Type II diabetes (PMID: 12032636). CAMK2G has some isoforms with the MW of 55-66 kDa and this antibody can recognize all the isoforms of CAMK2G. This antibody may have cross-reaction with CAMK2A/B/D due to the high homology.

Notable Publications

Author	Pubmed ID	Journal	Application
Chao Li	26317901	Oncotarget	WB
Jamee M Berg	26627310	Neuron	WB
Zhongyang Lv	34006826	Cell Death Dis	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

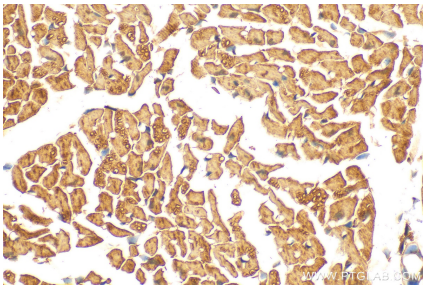
For technical support and original validation data for this product please contact:

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

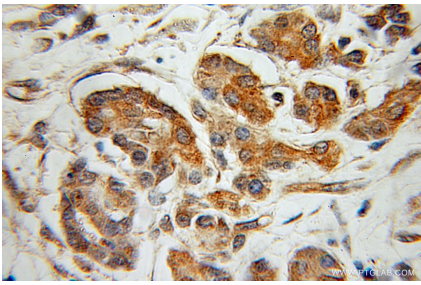
E: proteintech@ptglab.com
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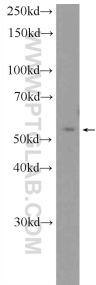
Selected Validation Data



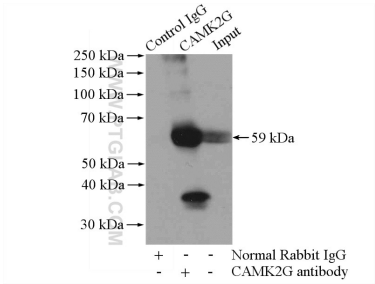
Immunohistochemical analysis of paraffin-embedded mouse heart tissue slide using 12666-2-AP (CaMKII Gamma antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



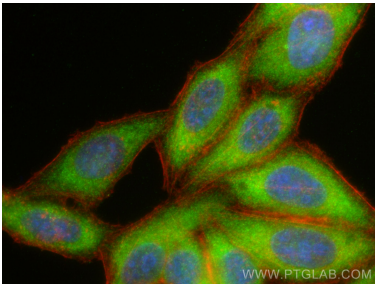
Immunohistochemical analysis of paraffin-embedded human pancreas cancer using 12666-2-AP (CaMKII gamma antibody) at dilution of 1:100 (under 10x lens).



SMMC-7721 cells were subjected to SDS PAGE followed by western blot with 12666-2-AP (CaMKII gamma antibody at dilution of 1:2000 incubated at room temperature for 1.5 hours.



IP result of anti-CaMKII Gamma (IP:12666-2-AP, 4ug; Detection:12666-2-AP 1:1000) with mouse heart tissue lysate 3200ug.



Immunofluorescent analysis of (-20°C Ethanol) fixed HepG2 cells using CaMKII Gamma antibody (12666-2-AP) at dilution of 1:400 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), CL594-phalloidin (red).