

For Research Use Only

# CaMKII Gamma Polyclonal antibody



Catalog Number: 12666-2-AP

Featured Product

19 Publications

## Basic Information

### Catalog Number:

12666-2-AP

### Size:

450 µg/ml

### 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 µg for 1.0-3.0 mg of total protein lysate

IHC 1:20-1:200

IF 1:10-1:100

## Applications

### Tested Applications:

IF/ICC, IHC, IP, WB, ELISA

### Cited Applications:

WB, IF, IHC

### Species Specificity:

human, mouse, rat

### Cited Species:

human, rat, mouse

### Positive Controls:

WB : SMMC-7721 cells, human brain tissue

IP : mouse heart tissue,

IHC : human pancreas cancer tissue,

IF : HepG2 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

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 has been shown to be 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

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

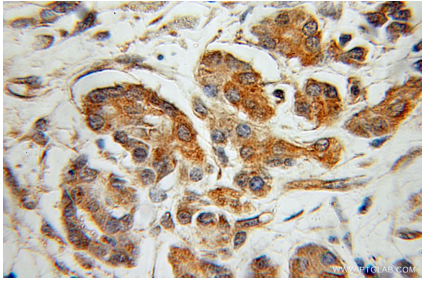
T: 4006900926

E: Proteintech-CN@ptglab.com

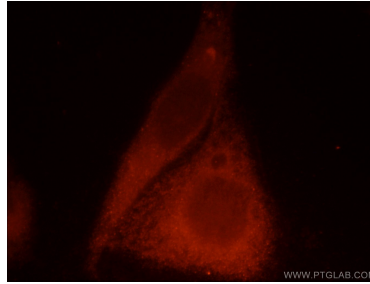
W: ptgcn.com

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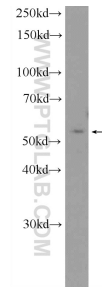
## Selected Validation Data



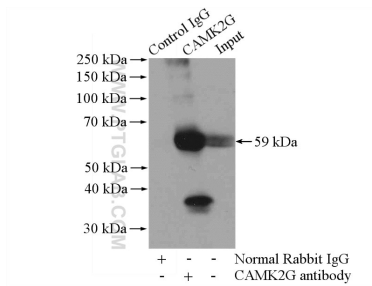
Immunohistochemical analysis of paraffin-embedded human pancreas cancer using 12666-2-AP (CaMKII gamma antibody) at dilution of 1:100 (under 10x lens).



Immunofluorescent analysis of HepG2 cells, using CAMK2G antibody 12666-2-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).



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.