

For Research Use Only

# CaMKII Gamma Polyclonal antibody



Catalog Number: 12666-2-AP

Featured Product

19 Publications

## Basic Information

<b>Catalog Number:</b> 12666-2-AP	<b>GenBank Accession Number:</b> BC034044	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 150ul , Concentration: 450 µg/ml by Nanodrop;	<b>GeneID (NCBI):</b> 818	<b>Recommended Dilutions:</b> WB 1:1000-1:4000 IP 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate IHC 1:20-1:200 IF 1:10-1:100
<b>Source:</b> Rabbit	<b>Full Name:</b> calcium/calmodulin-dependent protein kinase II gamma	
<b>Isotype:</b> IgG	<b>Calculated MW:</b> 527 aa, 59 kDa	
<b>Immunogen Catalog Number:</b> AG3348	<b>Observed MW:</b> 59 kDa	

## Applications

<b>Tested Applications:</b> IF, IHC, IP, WB, ELISA	<b>Positive Controls:</b> WB : SMMC-7721 cells, human brain tissue IP : mouse heart tissue, IHC : human pancreas cancer tissue, IF : HepG2 cells,
<b>Cited Applications:</b> IF, IHC, WB	
<b>Species Specificity:</b> human, mouse, rat	
<b>Cited Species:</b> human, rat, mouse	

**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

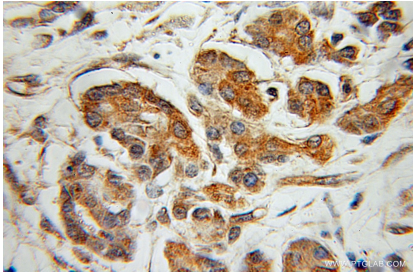
**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
Aliquoting is unnecessary for -20°C storage

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

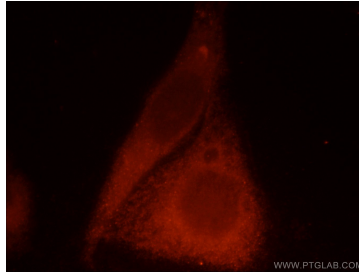
For technical support and original validation data for this product please contact:  
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)  
E: proteintech@ptglab.com  
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

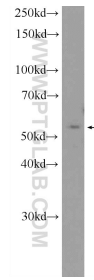
## Selected Validation Data



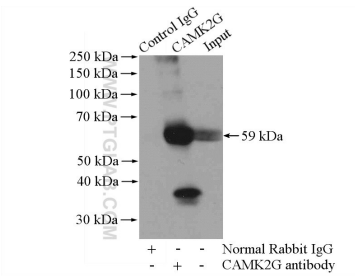
Immunohistochemical analysis of paraffin-embedded human pancreas cancer using 12666-2-AP (CaMKII gamma antibody) at dilution of 1:100 (under 10x lens).



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.