

For Research Use Only

PKC Epsilon Polyclonal antibody

Catalog Number: 20877-1-AP

Featured Product

21 Publications



Basic Information

Catalog Number:

20877-1-AP

Size:

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

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG14976

GenBank Accession Number:

BC109033

GeneID (NCBI):

5581

UNIPROT ID:

Q02156

Full Name:

protein kinase C, epsilon

Calculated MW:

737 aa, 84 kDa

Observed MW:

84 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB 1:5000-1:50000

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

IHC 1:50-1:500

IF-P 1:50-1:500

IF/ICC 1:50-1:500

Applications

Tested Applications:

WB, IHC, IF/ICC, IF-P, FC (Intra), IP, ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human, mouse, rat

Cited Species:

human, mouse, rat, hamster

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, SH-SY5Y cells, rat brain tissue

IP : SH-SY5Y cells,

IHC : mouse brain tissue, human thyroid cancer tissue

IF-P : mouse brain tissue,

IF/ICC : HeLa cells, U2OS cells

Background Information

PKC Epsilon (Protein kinase C epsilon type) is also named as PKC-ε, PRKCE and PKCE. It belongs to the protein kinase superfamily, AGC Ser/Thr protein kinase family and PKC subfamily. PKC-ε, one of the novel isoforms, as a critical player in membrane mobilization during phagocytosis (PMID: 9069266). KC-ε is tethered to the Golgi through binding of its pseudosubstrate domain to phosphatidylinositol-4-phosphate (PI4P) (PMID: 28539432). PKC-ε traffics on microtubule-associated vesicles from the Golgi to the forming phagosome. As the majority of macrophage PKC-ε is cytosolic, and PKCs translocate from the cytosol to their sites of activity, it predicted that cytosolic PKC-ε concentrated at phagosomes to facilitate membrane addition (PMID: 34622926). Two PKC isozymes of the novel group, PKCε and PKCδ, have different and sometimes opposite effects. PKCε stimulates cell growth and differentiation while PKCδ is apoptotic (PMID: 21810427).

Notable Publications

Author	Pubmed ID	Journal	Application
Yupeng Hu	27649624	Chem Biol Interact	WB
Shuyan Liu	36158087	Heliyon	WB
Guangming Zhang	34470528	Cell Transplant	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

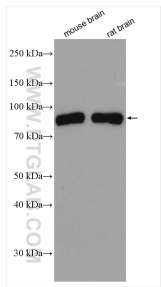
For technical support and original validation data for this product please contact:

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

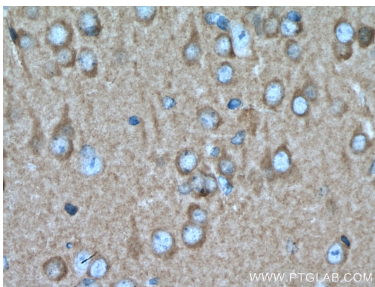
E: proteintech@ptglab.com
W: ptglab.com

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

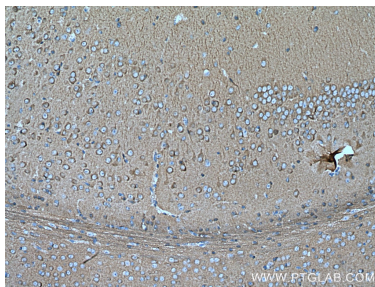
Selected Validation Data



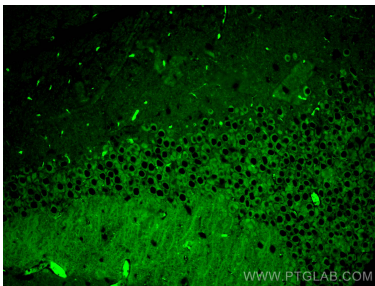
Various lysates were subjected to SDS PAGE followed by western blot with 20877-1-AP (PKC Epsilon antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



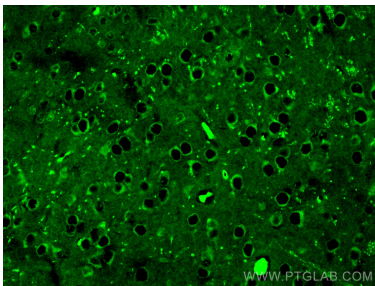
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 20877-1-AP (PKC epsilon antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieved with Sodium Citrate buffer (pH 6.0).



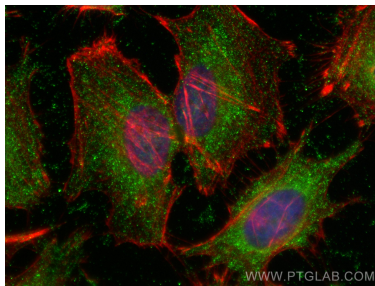
Immunohistochemical analysis of paraffin-embedded mouse brain tissue slide using 20877-1-AP (PKC epsilon antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieved with Sodium Citrate buffer (pH 6.0).



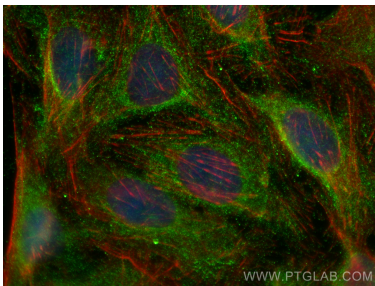
Immunofluorescent analysis of (4% PFA) fixed mouse brain tissue using PKC Epsilon antibody (20877-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



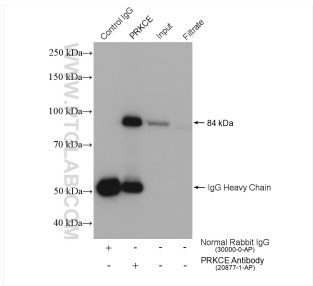
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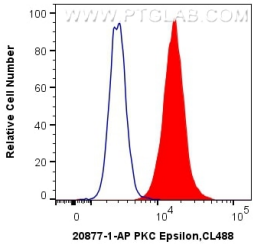
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using PKC Epsilon antibody (20877-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



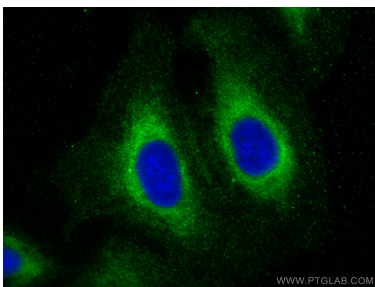
Immunofluorescent analysis of (-20°C Ethanol) fixed U2OS cells using PKC Epsilon antibody (20877-1-AP) at dilution of 1:200 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



IP result of anti-PKC Epsilon (IP:20877-1-AP, 4ug; Detection:20877-1-AP 1:800) with SH-SY5Y cells lysate 1240 ug.



1X10⁶ Jurkat cells were intracellularly stained with 0.4 ug Anti-Human PKC Epsilon (20877-1-AP) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Immunofluorescent analysis of (-20°C Methanol)
fixed U2OS cells using PKC Epsilon antibody
(20877-1-AP) at dilution of 1:400 and
CoraLite®488-Conjugated Goat Anti-Rabbit
IgG(H+L).