PKC ζ (Phospho Thr410) Rabbit pAb

CatalogNo: YP0229 Orthogonal Validated

Key Features

Host Species
- Rabbit

Reactivity
- Human,Mouse,Rat

Applications
- WB,IHC,IF,ELISA

MW
- 70kD (Observed)

Isotype
- IgG

Storage

Storage*	-15°C to -25°C/1 year (Do not lower than -25°C)
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Recommended Dilution Ratios

WB 1:500-1:2000
IHC 1:100-1:300
IF 1:200-1:1000
ELISA 1:20000
Not yet tested in other applications.

Basic Information

Clonality	Polyclonal

Immunogen Information

Immunogen	The antiserum was produced against synthesized peptide derived from human PKC zeta around the phosphorylation site of Thr410. AA range:376-425

Specificity Phospho-PKC ζ (T410) Polyclonal Antibody detects endogenous levels of PKC ζ protein only when phosphorylated at T410.The name of modified sites may be influenced by many factors, such as species (the modified site was not originally found in human samples) and the change of protein sequence (the previous protein sequence is incomplete, and the protein sequence may be prolonged with the development of protein sequencing technology). When naming, we will use the "numbers" in historical reference to keep the sites consistent with the reports. The antibody binds to the following modification sequence (lowercase letters are modification sites):TStFC

Target Information

Gene name PRKCZ

Protein Name Protein kinase C zeta type

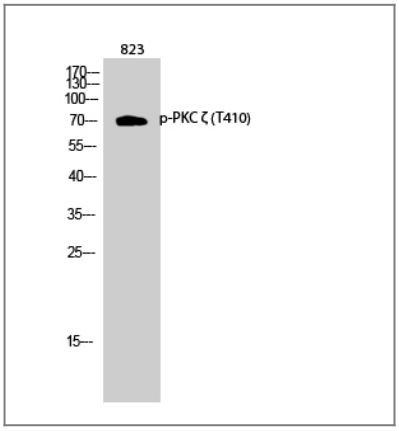
Organism	Gene ID	UniProt ID
Human	5590;	Q05513;
Mouse	18762;	Q02956;
Rat	25522;	P09217;

Cellular Localization Cytoplasm . Endosome . Cell junction . Membrane ; Peripheral membrane protein . In the retina , localizes in the terminals of the rod bipolar cells (By similarity) . Associates with endosomes (PubMed:9566925) . Presence of KRIT1 , CDH5 and RAP1B is required for its localization to the cell junction (PubMed:7597083) . Colocalizes with VAMP2 and WDFY2 in intracellular vesicles (PubMed:17313651) . Transiently translocates to the membrane of CA1 hippocampal cells in response to the induction of long term potentiation (By similarity) . .; [Isoform 2]: Cytoplasm .

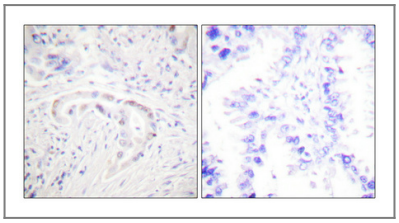
Tissue specificity Expressed in brain , and to a lesser extent in lung , kidney and testis.

Function Catalytic activity:ATP + a protein = ADP + a phosphoprotein. ,Domain:The C1 domain does not bind the diacylglycerol (DAG) . ,Domain:The OPR domain mediates mutually exclusive interactions with SQSTM1 and PARD6B. ,enzyme regulation:Phosphatidylinositol 3 ,4 ,5-trisphosphate might be a physiological activator. Two specific sites , Thr-410 (activation loop of the kinase domain) and Thr-560 (turn motif) , need to be phosphorylated for its full activation. ,Function:PKC is activated by diacylglycerol which in turn phosphorylates a range of cellular proteins. PKC also serves as the receptor for phorbol esters , a class of tumor promoters. Subunit of a quaternary complex that plays a central role in epithelial cell polarization. ,Function:This is a calcium-independent , phospholipid-dependent , serine- and threonine-specific enzyme. ,similarity:Belongs to the protein kinase superfamily. ,similarity:Belongs to the protein kinase superfamily. AGC Ser/Thr protein kinase family. PKC subfamily. ,similarity:Contains 1 AGC-kinase C-terminal domain. ,similarity:Contains 1 OPR domain. ,similarity:Contains 1 phorbol-ester/DAG-type zinc finger. ,similarity:Contains 1 protein kinase domain. ,subcellular location:In the retina , localizes in the terminals of the rod bipolar cells (By similarity) . Associates with endosomes. ,subunit:Forms a ternary complex with SQSTM1 and KCNAB2. Forms another ternary complex with SQSTM1 and GABRR3. Forms a complex with SQSTM1 and MAP2K5 (By similarity) . Interacts with PARD6A , PARD6B , PARD6G and SQSTM1. Part of a complex with PARD3 , PARD6A or PARD6B or PARD6G and CDC42 or RAC1. Interacts with ADAP1/CENTA1. Forms a ternary complex composed of SQSTM1 and PAWR. Interacts directly with SQSTM1 (Probable) . Interacts with IKBKB. ,tissue specificity:Expressed in brain , and to a lesser extent in lung , kidney and testis. ,

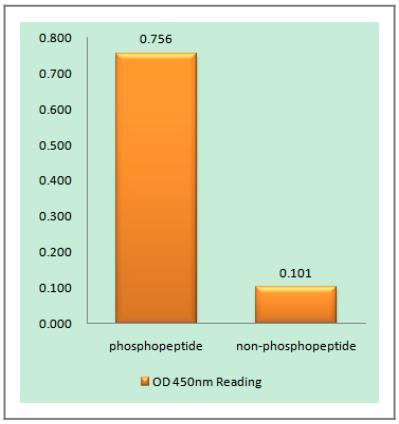
Validation Data



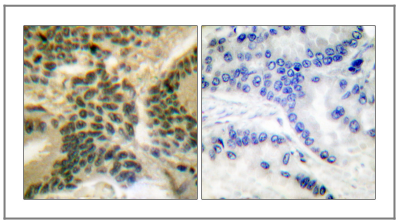
Western Blot analysis of 823 cells using Phospho-PKC ζ (T410) Polyclonal Antibody diluted at 1:1000



Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100 (4℃ overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using PKC zeta (Phospho-Thr410) Antibody



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma, using PKC zeta (Phospho-Thr410) Antibody. The picture on the right is blocked with the phospho peptide.

Contact information

Orders: order@immunoway.com
Support: tech@immunoway.com
Telephone: 877-594-3616 (Toll Free), 408-747-0185
Website: http://www.immunoway.com
Address: 2200 Ringwood Ave San Jose, CA 95131 USA

Please scan the QR code to access additional product information:
PKC ζ (Phospho Thr410) Rabbit pAb

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