
Product Name: KD-Validated Phospho-PKC Gamma (Thr514) Recombinant Rabbit Monoclonal Antibody

Catalog #: KVAAb00778

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000
Molecular Weight	Calculated MW: 78.4kDa

Antigen Information

Gene Name	PRKCG PRKCG; Protein Kinase C Gamma; PKC-Gamma; PKCC; PKCG; Protein Kinase C Gamma Type;
Alternative Names	EC 2.7.11.13; MGC57564;SCA14; Protein Kinase C, Gamma; EC 2.7.11; PKCgamma; PKCI(3); PKCγ
Gene ID	5582.0
SwissProt ID	P05129
Immunogen	A synthesized peptide derived from human Phospho-PKC gamma (Thr514)

Background

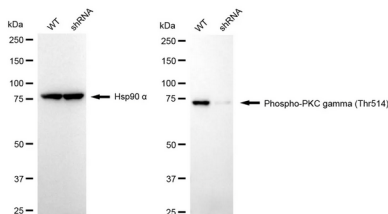
Protein kinase C (PKC) is a family of serine- and threonine-specific protein kinases that can be activated by calcium and second

messenger diacylglycerol. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC also serve as major receptors for phorbol esters, a class of tumor promoters. Each member of the PKC family has a specific expression profile and is believed to play distinct roles in cells. The protein encoded by this gene is one of the PKC family members. This protein kinase is expressed solely in the brain and spinal cord and its localization is restricted to neurons. It has been demonstrated that several neuronal functions, including long term potentiation (LTP) and long term depression (LTD), specifically require this kinase. Knockout studies in mice also suggest that this kinase may be involved in neuropathic pain development. Defects in this protein have been associated with neurodegenerative disorder spinocerebellar ataxia-14 (SCA14). Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Oct 2015]

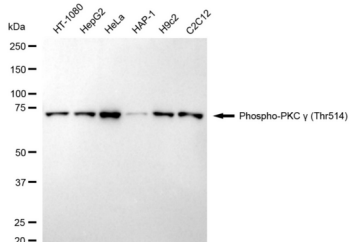
Research Area

Signal Transduction, Neuroscience

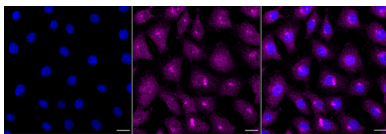
Image Data



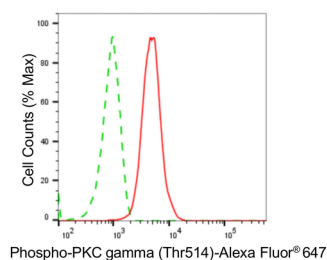
Western blotting analysis using phospho-PKC gamma (Thr514) antibody (KVA00778). Phospho-PKC gamma (Thr514) expression in wild type (WT) and PRKCG shRNA knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with phospho-PKC gamma (Thr514) antibody (KVA00778, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Western blotting analysis using phospho-PKC gamma (Thr514) antibody (KVA00778). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with phospho-PKC gamma (Thr514) antibody (KVA00778, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunocytochemical staining of C2C12 cells with Phospho-PKC gamma (Thr514) antibody (KVA00778, 1:1,000). Nuclei were stained blue with DAPI; Phospho-PKC gamma (Thr514) was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.



Flow cytometric analysis of Phospho-PKC gamma (Thr514) expression in C2C12 cells using Phospho-PKC gamma (Thr514) antibody (KVA00778, 1:2,000). Green, isotype control; red, Phospho-PKC gamma (Thr514).