bs-3333R **[Primary Antibody]**

phospho-PKC alpha (Thr638) Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 5578 **SWISS:** P17252

Target: PKC alpha (Thr638)

Immunogen: KLH conjugated synthesised phosphopeptide derived from human PKC alpha around the phosphorylation site of Thr638: VL(p-T)PP.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Protein Kinase c alpha (PKC alpha) is an 77 kDa member of the conventional group (cPKCs: sensitive to calcium, diacylglycerol, phosphatidylserine and phorbol esters) of the PKC family of serine/ threonine kinases that are involved in a wide range of physiological processes including mitogenesis, cell survival and transcriptional regulation. PKC alpha is an ubiquitously expressed PKC isozyme that has been implicated in the regulation of a broad range of cellular functions including proliferation, differentiation, development, migration, cell cell adhesion, cell extracellular matrix adhesion, and solute transport. The activation loop threonine (threonine 497 in PKC alpha) of conventional PKCs is phosphorylated by phosphoinositide dependent kinase 1 (PDK1). This phosphorylation is necessary for the autophosphorylation of threonine 638 in the carboxy terminus of PKC alpha, a step that is critical for regulating the rate of PKC alpha dephosphorylation and inactivation.

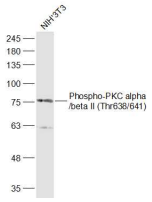
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)

Reactivity: Mouse, Rat (predicted: Human, Cow, Chicken, Dog, Horse)

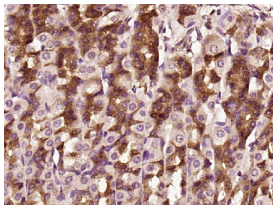
Predicted MW.: 77 kDa

Subcellular Location: Cell membrane ,Cytoplasm ,Nucleus

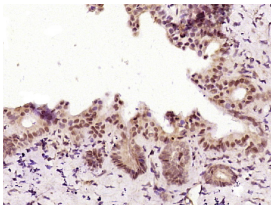
VALIDATION IMAGES



Sample: NIH/3T3(Mouse) Cell Lysate at 30 ug
Primary: Anti-Phospho-PKC alpha/beta II (Thr638/641) (bs-3333R) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 77 kD
Observed band size: 77 kD



Paraformaldehyde-fixed, paraffin embedded (Rat stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phospho-PKC alpha beta II (Thr638 641)) Polyclonal Antibody, Unconjugated (bs-3333R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.



Paraformaldehyde-fixed, paraffin embedded (Rat pancreas); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Phospho-PKC alpha beta II (Thr638 641)) Polyclonal Antibody, Unconjugated (bs-3333R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

SELECTED CITATIONS

- **[IF=10.82]** Edens, Lisa J., and Daniel L. Levy. "cPKC regulates interphase nuclear size during Xenopus development."

The Journal of Cell Biology 206.4 (2014): 473-483. ICC ;X. laevis&X. tropicali. 25135933

- **[IF=6.117]** Minghui Zhang. et al. Selenomethionine promotes ANXA2 phosphorylation for proliferation and protein synthesis of myoblasts and skeletal muscle growth. J NUTR BIOCHEM. 2023 Feb;:109277 WB ;Mouse. 36739096
- **[IF=5.195]** Jiawei Wang. et al. Validation of MAPK signalling pathway as a key role of paeoniflorin in the treatment of intrahepatic cholestasis of pregnancy based on network pharmacology and metabolomics. EUR J PHARMACOL. 2022 Nov;935:175331 WB ;Rat. 36273619
- **[IF=3.69]** Edens et al. PKC-mediated phosphorylation of nuclear lamins at a single serine residue regulates interphase nuclear size in Xenopus and mammalian cells. (2017) Mol.Biol.Cel. 28:1389-1399 IF ;. 28356420
- **[IF=3.881]** Rui Ding. et al. Endoplasmic reticulum stress and oxidative stress contribute to neuronal pyroptosis caused by cerebral venous sinus thrombosis in rats: Involvement of TXNIP/peroxynitrite-NLRP3 inflammasome activation. Neurochem Int. 2020 Dec;141:104856 WB,IF ;Rat. 32980492