Datasheet for ABIN744758

anti-PRKCA beta 2 antibody (pThr638, pThr641)

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Overview

Quantity:	100 µL
Target:	PRKCA beta 2
Binding Specificity:	pThr638, pThr641
Reactivity:	Human, Mouse, Rat, Dog
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This PRKCA beta 2 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (Cultured Cells) (IF (cc)), Immunofluorescence (Paraffin-embedded Sections) (IF (p)), ELISA, Immunohistochemistry (Frozen Sections) (IHC (fro)), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p))

Product Details

Immunogen:	KLH conjugated synthetic phosphopeptide derived from human PKC alpha/beta II around the phosphorylation site of Thr638/641
Isotype:	IgG
Cross-Reactivity:	Dog, Mouse, Rat
Predicted Reactivity:	Human,Cow,Horse,Chicken
Purification:	Purified by Protein A.

Target Details

Target:	PRKCA beta 2

Target Details

Abstract:	PRKCA beta 2 Products
Background:	Synonyms: AAG6, PKCA, PRKACA, PKC-alpha, Protein kinase C alpha type, PKC-A, PRKCA 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.
Gene ID:	5578
UniProt:	P17252

Application Details

Application Notes:	WB 1:100-1000 IHC-P 1:100-500 IF(IHC-P) 1:50-200
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	1 μg/μL
Buffer:	0.01M TBS(pH 7.4) with 1 % BSA, 0.02 % Proclin300 and 50 % Glycerol.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Handling

Expiry Date:	12 months

Publications

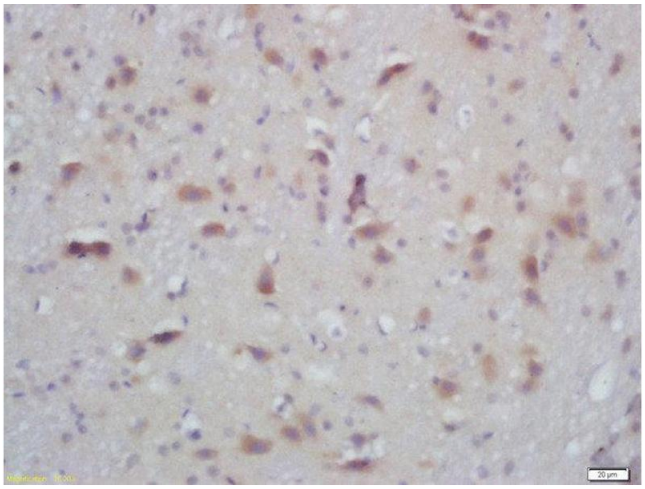
Product cited in:

Edens, Dilsaver, Levy: "PKC-mediated phosphorylation of nuclear lamins at a single serine residue regulates interphase nuclear size in Xenopus and mammalian cells." in: **Molecular biology of the cell**, Vol. 28, Issue 10, pp. 1389-1399, (2017) (PubMed).

Król, Mucha, Majchrzak, Homa, Bulkowska, Majewska, Gajewska, Pietrzak, Perszko, Romanowska, Paw?owski, Manuali, Hellmen, Motyl: "Macrophages mediate a switch between canonical and non-canonical Wnt pathways in canine mammary tumors." in: **PLoS ONE**, Vol. 9, Issue 1, pp. e83995, (2014) (PubMed).

Edens, Levy: "cPKC regulates interphase nuclear size during Xenopus development." in: **The Journal of cell biology**, Vol. 206, Issue 4, pp. 473-83, (2014) (PubMed).

Images



Immunohistochemistry (Paraffin-embedded Sections)

Image 1. Formalin-fixed and paraffin embedded mouse brain labeled with Rabbit Anti-PKC alpha/beta II (Thr638/641) Polyclonal Antibody, Unconjugated at 1:200 followed by conjugation to the secondary antibody and DAB staining

Western Blotting

Image 2. Image kindly provided by Dr. Magdalena Krol. Control tumor cells, tumor cells grown in macrophage-conditioned medium, tumor cells sorted from co-culture with macrophages, and macrophages from monocultures and sorted from co-culture with tumor cells were analyzed. Total protein concentrations in lysates were determined using a Bio-Rad protein assay. Proteins (50 mg) were resolved using SDS-PAGE and transferred onto PVDF membranes. The membranes were then blocked with 5% non-fat dry milk in TBS buffer containing 0.5% Tween 20. The membranes were then incubated overnight with the primary Rabbit Anti-PKC alpha/beta II (Thr638/641) Polyclonal Antibody at 1:100 dilution. Subsequently, the membranes were washed three times in TBS containing 0.5% Tween 20 and incubated for 1 h at room temperature with secondary antibodies conjugated with the appropriate infrared (IR) fluorophore IRDyeH 800 CW or IRDyeH 680 RD at a dilution of 1:5000.

