

## PKCb(Phospho-Thr641) Antibody

Catalog No: #11172

Package Size: #11172-1 50ul #11172-2 100ul

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## Description

Product Name	PKCb(Phospho-Thr641) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic peptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific peptide.
Applications	WB IHC IF
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous levels of PKCb only when phosphorylated at threonine 641.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of threonine 641 (E-L-T(p)-P-T) derived from Human PKCb
Target Name	PKCb
Modification	Phospho
Other Names	PKCB; PRKCB1; PRKCB2
Accession No.	Swiss-Prot: P05771NCBI Protein: NP_002729.2
Uniprot	P05771
GeneID	5579;
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

## Application Details

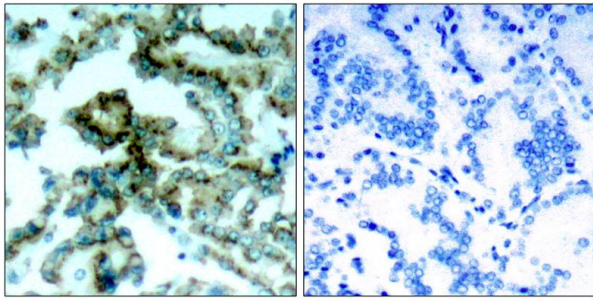
Predicted MW: 82kd

Western blotting: 1:500~1:1000

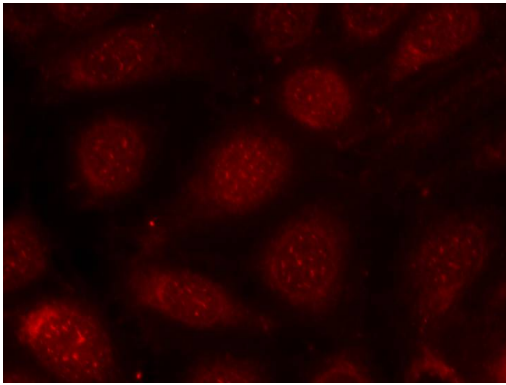
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

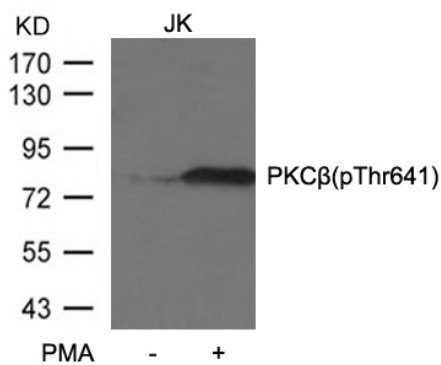
## Images



Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue, using PKC $\beta$ (phospho-Thr641) antibody(#11172).



Immunofluorescence staining of methanol-fixed MCF7 cells using PKC $\beta$ (phospho-Thr641) antibody(#11172, Red).



Western blot analysis of extracts from JK cells untreated or treated with PMA using PKC $\beta$  (phospho-Thr641) antibody #11172.

## Background

Calcium-activated and phospholipid-dependent serine/threonine-protein kinase involved in various processes such as regulation of the B-cell receptor (BCR) signalosome, apoptosis and transcription regulation. Plays a key role in B-cell activation and function by regulating BCR-induced NF-kappa-B activation and B-cell survival. Required for recruitment and activation of the IKK kinase to lipid rafts and mediates phosphorylation of CARD11/CARMA1 at 'Ser-559', 'Ser-644' and 'Ser-652', leading to activate the NF-kappa-B signaling. Involved in apoptosis following oxidative damage: in case of oxidative conditions, specifically phosphorylates 'Ser-36' of isoform p66Shc of SHC1, leading to mitochondrial accumulation of p66Shc, where p66Shc acts as a reactive oxygen species producer. Acts as a coactivator of androgen receptor (ANDR)-dependent transcription, by being recruited to ANDR target genes and specifically mediating phosphorylation of 'Thr-6' of histone H3 (H3T6ph), a specific tag for epigenetic transcriptional activation that prevents demethylation of histone H3 'Lys-4' (H3K4me) by LSD1/KDM1A. Also involved in triglyceride homeostasis. Serves as the receptor for phorbol esters, a class of tumor promoters.

Zhang Y, et al. (2006) Mol Cell Biol ; 26: 6748-6761

Castoria G, et al. (2004) Mol Cell Biol ; 24: 7643-7653

Marcil J, et al. (1999) Biochem J ; 337:185-192

Bornancin F, et al. (1996) Curr Biol ; 6:1114-1123.

Note: This product is for in vitro research use only