Product Datasheet

PKCb(Phospho-Thr641) Antibody

Catalog No: #11172

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

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

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
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), 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

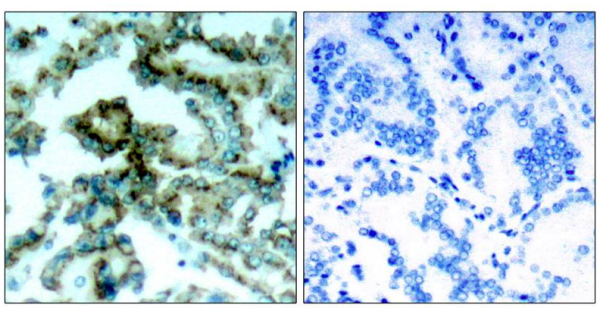
Predicted MW: 82kd

Western blotting: 1:500~1:1000

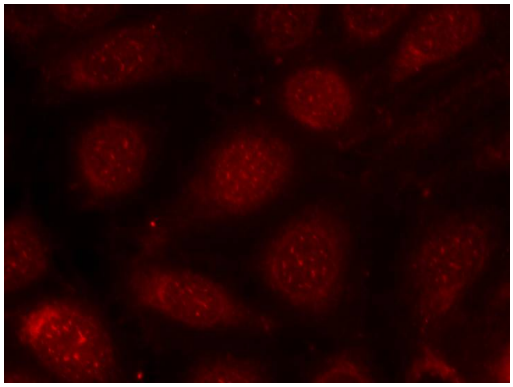
Immunohistochemistry: 1:50~1:100

Immunofluorescence: 1:100~1:200

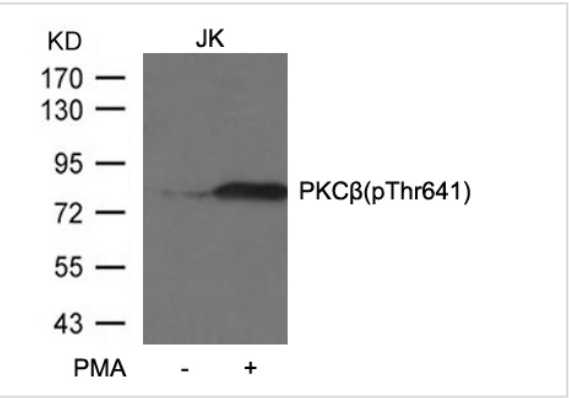
Images



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



Immunofluorescence staining of methanol-fixed MCF7 cells using PKCb(phospho-Thr641) antibody(#11172, Red).



Western blot analysis of extracts from JK cells untreated or treated with PMA using PKCβ (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 suvival. 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.

Published Papers

el at., Investigation of the anti-tumor mechanism of tirabrutinib, a highly selective Bruton's tyrosine kinase inhibitor, by phosphoproteomics and transcriptomics InPLoS OneOn2023 Mar 10byRyohei Kozaki , Tomoko Yasuhiro et al..PMID:36897912, , (2023)

PMID:36897912

el at., High glucose stimulates mineralocorticoid receptor transcriptional activity through the protein kinase C ε˚Y signaling.In Int Heart J on 2017 Oct 21 by Takeshi Hayashi, Hirotaka Shibata,et al..PMID: 28966330, , (2017)

PMID:28966330

Jack N. Losso, Robert E. Truax, Gerald Richard el at., trans-Resveratrol Inhibits Hyperglycemia-Induced Inflammation and Connexin Downregulation in Retinal Pigment Epithelial Cells., Journal of Agricultural and Food Chemistry, 58 (14), 8246η— C8252(2010)

PMID:20578705

Note: This product is for in vitro research use only and is not intended for use in humans or animals.