

35-1163: Polyclonal Antibody to PKCbeta (Phospho-Thr641)

Clonality :	Polyclonal
Application :	WB,IHC,IF
Reactivity :	Human,Mouse,Rat
Gene :	PRKCB
Gene ID :	5579
Uniprot ID :	P05771
Format :	Purified
Alternative Name :	PKCB, PRKCB1, PRKCB2
Isotype :	Rabbit IgG
Immunogen Information :	Peptide sequence around phosphorylation site of threonine 641 (E-L-T(p)-P-T) derived from Human PKCb

Description

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.

Product Info

Amount :	50 µl / 100 µl
Content :	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Predicted MW: 82kd, Western blotting: 1:500~1:1000, Immunohistochemistry: 1:50~1:100, Immunofluorescence: 1:100~1:200

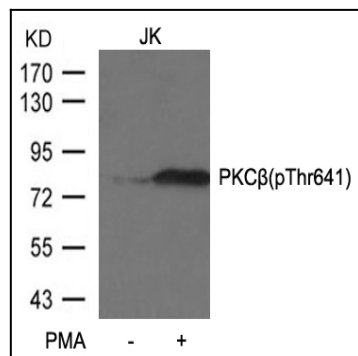


Figure 1: Western blot analysis of extracts from JK cells untreated or treated with PMA using PKCβ (phospho-Thr641) Antibody 35-1163 .

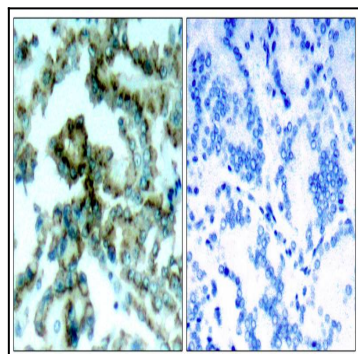


Figure 2: Immunohistochemical analysis of paraffin-embedded human lung carcinoma tissue, using PKCβ(phospho-Thr641) antibody(35-1163).

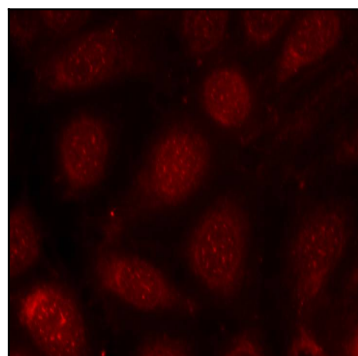


Figure 3: Immunofluorescence staining of methanol-fixed MCF7 cells using PKCβ(phospho-Thr641) antibody(35-1163 , Red).