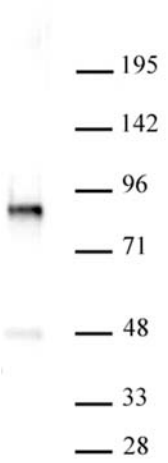
PKC-B antibody (pAb)

Catalog Nos: 61733, 61734
RRID: AB_2793748
Isotype: IgG
Application(s): WB
Reactivity: Human

Volumes: 100 µl, 10 µl
Purification: Affinity Purified
Host: Rabbit
Molecular Weight: 85 kDa

Background: PKC-B (Protein Kinase C, Beta) ia a calcium-activated, phospholipid- and diacylglycerol (DAG)-dependent serine/threonine-protein kinase involved in various cellular processes such as regulation of the B-cell receptor (BCR) signalosome, oxidative stress-induced apoptosis, androgen receptor-dependent transcription regulation, insulin signaling and endothelial cells proliferation. Plays a key role in B-cell activation by regulating BCR-induced NF-kappa-B activation. Mediates the activation of the canonical NF-kappa-B pathway (NFKB1) by direct phosphorylation of CARD11/CARMA1 at Ser-559, Ser-644 and Ser-652. Plays a direct role in the negative feedback regulation of the BCR signaling, by down-modulating BTK function via direct phosphorylation of BTK at Ser-180, which results in the alteration of BTK plasma membrane localization and in turn inhibition of BTK activity. Involved in apoptosis following oxidative damage.

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. Under high glucose in pancreatic beta-cells, is probably involved in the inhibition of the insulin gene transcription, via regulation of MYC expression. In endothelial cells, activation of PRKCB induces increased phosphorylation of RB1, increased VEGFA-induced cell proliferation, and inhibits PI3K/AKT-dependent nitric oxide synthase (NOS3/eNOS) regulation by insulin, which causes endothelial dysfunction. Phosphorylates ATF2 which promotes cooperation between ATF2 and JUN, activating transcription.



PKC-B antibody (pAb) tested by Western blot. PKC-B detection by Western blot. The analysis was performed using 20 µg of K562 nuclear cell extract and PKC-B antibody at a 1:500 dilution.

Immunogen: This antibody was raised against a peptide within the C-terminal region of human PKC-B.

Buffer: Purified IgG in PBS with 30% glycerol and 0.035% sodium azide. Sodium azide is highly toxic.

Application Notes:
Applications Validated by Active Motif:
WB*: 1:500 - 1:2,000 dilution

*Note: many chromatin-bound proteins are not soluble in a low salt nuclear extract and fractionate to the pellet. Therefore, we recommend a High Salt / Sonication Protocol when preparing nuclear extracts for Western blot.

Storage and Guarantee: Some products may be shipped at room temperature. This will not affect their stability or performance. Avoid repeated freeze/thaw cycles by