Product Datasheet

PKC beta Antibody

Catalog No: #48521

Package Size: #48521-1 50ul #48521-2 100ul

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

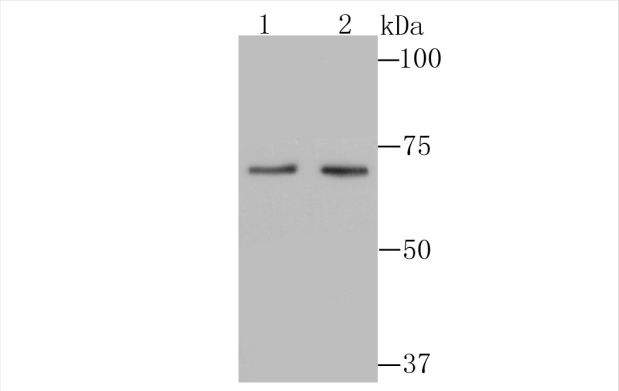
Description

Product Name	PKC beta Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Protein affinity purified
Applications	WB,ICC,IHC
Species Reactivity	Hu, Ms
Immunogen Description	Recombinant protein
Other Names	KPCB_HUMAN antibody PKC beta antibody PKC-B antibody PKC-beta antibody PKCB antibody Prkcb antibody PRKCB I antibody PRKCB1 antibody PRKCB2 antibody Protein kinase C beta antibody Protein kinase C beta type antibody protein kinase C, beta 1 polypeptide antibody protein kinase C, beta-1 antibody
Accession No.	Swiss-Prot#:P05771
Uniprot	P05771
GeneID	5579;
Calculated MW	77 kDa
Formulation	1*TBS (pH7.4), 0.5%BSA, 50%Glycerol. Preservative: 0.05% Sodium Azide.
Storage	Store at -20°C

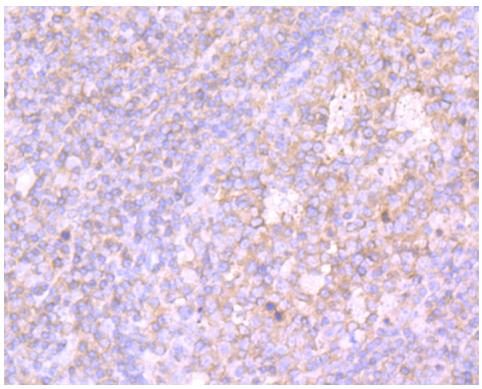
Application Details

WB: 1:500 IHC: 1:50-1:200 ICC: 1:50-1:200

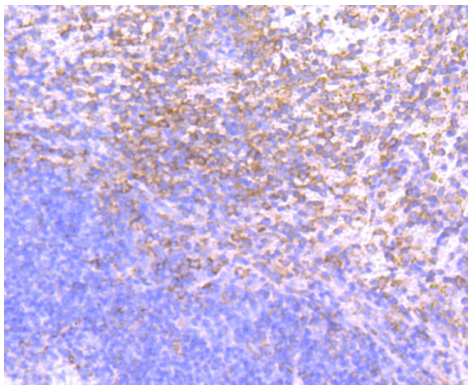
Images



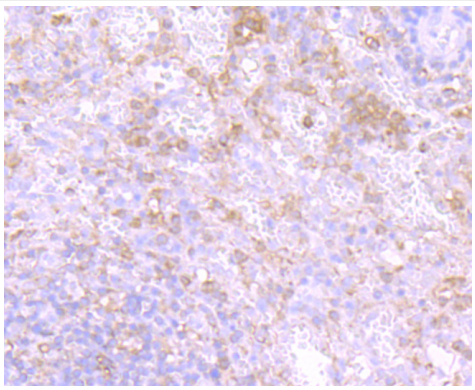
Western blot analysis of PKC beta 2 on different lysates using anti-PKC beta 2 antibody at 1/500 dilution. Positive controlοΩ½οΩ½ Lane1: Rat spleen tissue Lane2: Jurkat



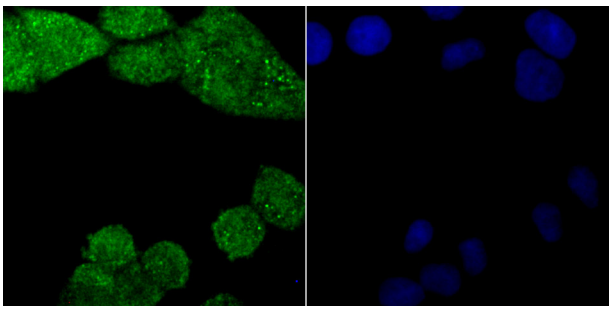
Immunohistochemical analysis of paraffin-embedded human tonsil tissue using anti-PKC beta 2 antibody. Counter stained with hematoxylin.



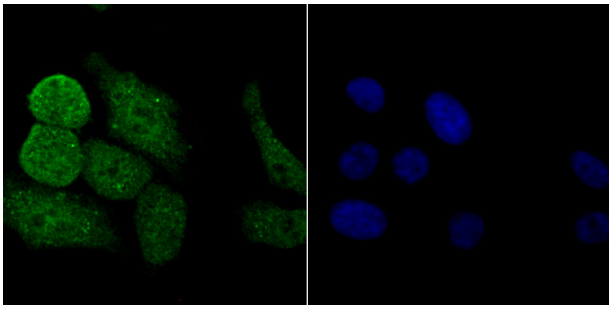
Immunohistochemical analysis of paraffin-embedded mouse spleen tissue using anti-PKC beta 2 antibody. Counter stained with hematoxylin.



Immunohistochemical analysis of paraffin-embedded human spleen tissue using anti-PKC beta 2 antibody. Counter stained with hematoxylin.



ICC staining PKC beta 2 in Hela cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.



ICC staining PKC beta 2 in HepG2 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

Background

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'. Phosphorylation induces CARD11/CARMA1 association with lipid rafts and recruitment of the BCL10-MALT1 complex as well as MAP3K7/TAK1, which then activates IKK complex, resulting in nuclear translocation and activation of NFKB1. 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. Also involved in triglyceride homeostasis (By similarity). Phosphorylates ATF2 which promotes cooperation between ATF2 and JUN, activating transcription.

References

Note: This product is for in vitro research use only