

Basic Information

Product Name	Anti-PKC Beta/PRKCB Antibody
Gene Name	PRKCB
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, IP, FCM
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	E.coli-derived human PKC beta 1 recombinant protein (Position: E542-V671). Human PKC beta 1 shares 100% amino acid (aa) sequence identity with both mouse and rat PKC beta 1.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	88 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 ImmunoPrecipitation (IP):1:250-300 Flow Cytometry (Fixed): 1:50-200

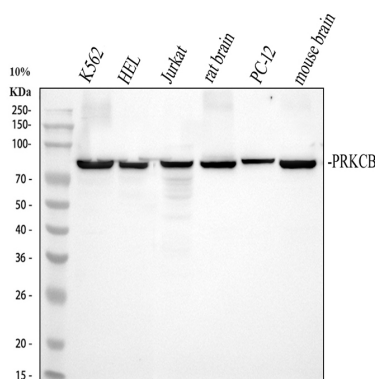
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Protein kinase C beta type is an enzyme that in humans is encoded by the PRKCB gene. It is a member of the protein kinase C (PKC) gene family. PKC family members phosphorylate a wide variety of protein targets and are known to be involved in diverse cellular signaling pathways. PKC family members also serve as major receptors for phorbol esters, a class of tumor promoters. This protein kinase has been reported to be involved in many different cellular functions, such as B cell activation, apoptosis induction, endothelial cell proliferation, and intestinal sugar absorption. It has been found that PRKCB activated by oxidative conditions in the cell, induces phosphorylation of p66(SHC) and triggers mitochondrial accumulation of the protein after it is recognized by the proyl isomerase PIN1.

Selected Validation Data



Western blot analysis of PKC Beta/PRKCB using anti-PKC Beta/PRKCB antibody (PB0355). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human K562 whole cell lysates,

Lane 2: human HEL whole cell lysates,

Lane 3: human Jurkat whole cell lysates,

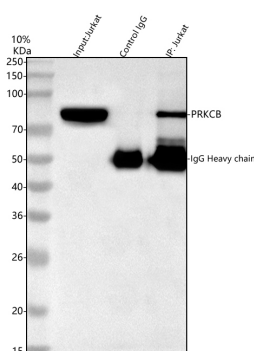
Lane 4: rat brain tissue lysates,

Lane 5: rat PC-12 whole cell lysates,

Lane 6: mouse brain tissue lysates.

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-PKC Beta/PRKCB antigen A03957-Aen affinity purified polyclonal antibody (PB0355) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for PKC Beta/PRKCB at approximately 88 kDa. The expected band size for PKC Beta/PRKCB is at 70 kDa.



IP analysis of PKC Beta/PRKCB using anti-PKC Beta/PRKCB antibody (PB0355) in Jurkat whole cell lysate.

Western blot analysis of PKC Beta/PRKCB using anti- PKC Beta/PRKCB antibody (PB0355).

Lane 1: Jurkat whole cell lysates(30ug),

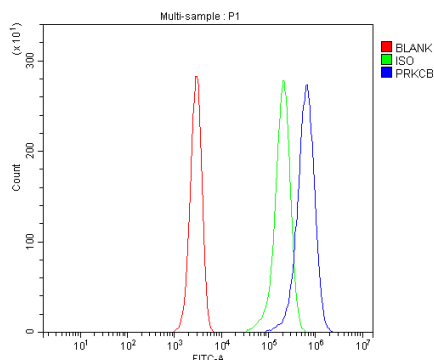
Lane 2: Rabbit control IgG instead of anti- PKC Beta/PRKCB antibody in Jurkat whole cell lysate,

Lane 3: anti- PKC Beta/PRKCB antibody (2μg) + Jurkat whole cell lysate (500μg).

After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti- PKC Beta/PRKCB antigen affinity purified polyclonal antibody (PB0355) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for PKC Beta/PRKCB at approximately 80 kDa. The

expected band size for PKC Beta/PRKCB is at 77 kDa.



Flow Cytometry analysis of Jurkat cells using anti-PKC Beta/PRKCB antibody (PB0355).

Overlay histogram showing Jurkat cells stained with PB0355 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PKC Beta/PRKCB Antibody (PB0355) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.