

Basic Information

Product Name	Anti-GRK3 Antibody	
Gene Name	GRK3	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, ICC/IF, FCM	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human GRK3 different from the related mouse and rat sequences by five amino acids.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	80 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200	

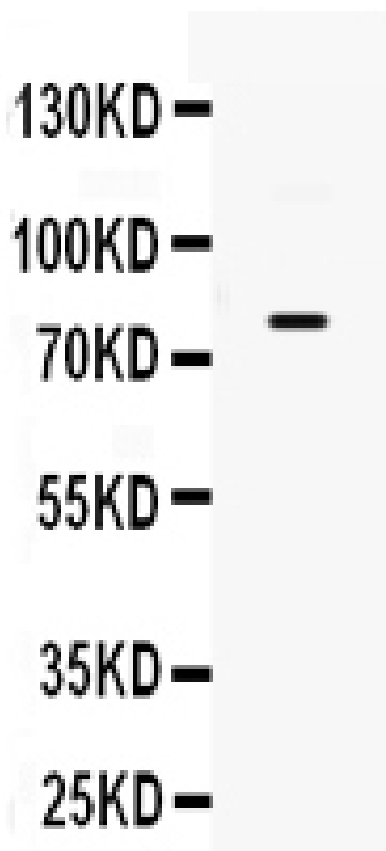
Storage

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

Background Information

Beta-adrenergic receptor kinase 2 (beta-ARK-2), also known as G-protein-coupled receptor kinase 3 (GRK3), is an enzyme that in humans is encoded by the ADRBK2 gene. The human ADRBK2 gene is located on 22q11. The beta-adrenergic receptor kinase specifically phosphorylates the agonist-occupied form of the beta-adrenergic and related G protein-coupled receptors. Overall, the beta adrenergic receptor kinase 2 has 85% amino acid similarity with beta adrenergic receptor kinase 1, with the protein kinase catalytic domain having 95% similarity. These data suggest the existence of a family of receptor kinases which may serve broadly to regulate receptor function.

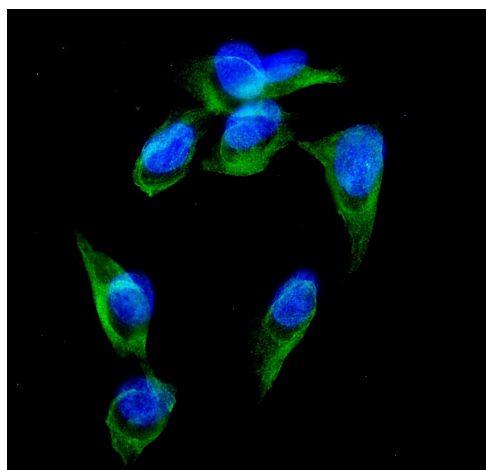
Selected Validation Data



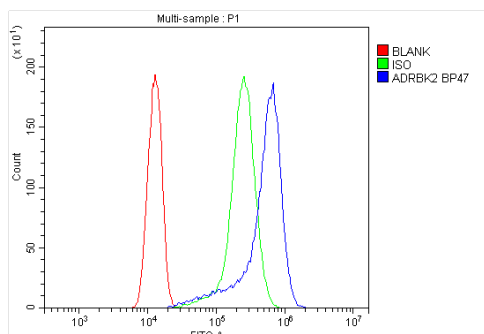
Western blot analysis of GRK3 using anti-GRK3 antibody (PB0744). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: JURKAT whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-GRK3 antigen affinity purified polyclonal antibody (PB0744) 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 GRK3 at approximately 80 kDa. The expected band size for GRK3 is at 80 kDa.



IF analysis of anti-ADRBK2 antibody (PB0744).ADRBK2 was detected in immunocytochemical section of U2OS cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2µg/mL rabbit anti-ADRBK2 antibody (PB0744). overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of A431 cells using anti-GRK3 antibody (PB0744). Overlay histogram showing A431 cells stained with PB0744 (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-GRK3 Antibody (PB0744) at 1:100 dilution for 30 min at 20°C. DyLight®488 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.