10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-PRKX Antibody

Catalog # AP59676

Product Information

Application	WB, IHC, IF/IC
Primary Accession	P51817
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40896

Additional Information

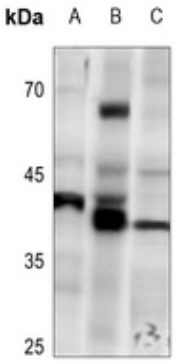
Gene ID	5613
Other Names	PKX1; cAMP-dependent protein kinase catalytic subunit PRKX; PrKX; Protein kinase X; Protein kinase X-linked; Serine/threonine-protein kinase PRKX; Protein kinase PKX1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human PRKX. The exact sequence is proprietary.
Dilution	WB~~WB (1/500 - 1/1000) IHC~~1:100~500 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

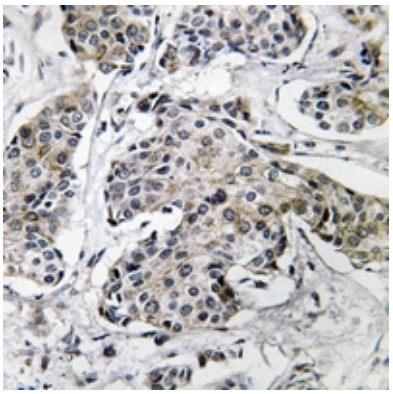
Name	PRKX
Synonyms	PKX1
Function	Serine/threonine protein kinase regulated by and mediating cAMP signaling in cells. Acts through phosphorylation of downstream targets that may include CREB, SMAD6 and PKD1 and has multiple functions in cellular differentiation and epithelial morphogenesis. Regulates myeloid cell differentiation through SMAD6 phosphorylation. Involved in nephrogenesis by stimulating renal epithelial cell migration and tubulogenesis. Also involved in angiogenesis through stimulation of endothelial cell proliferation, migration and vascular- like structure formation.
Cellular Location	Cytoplasm. Nucleus. Note=cAMP induces nuclear translocation
Tissue Location	Widely expressed (at protein level). Specifically expressed in blood by

macrophages and granulocytes according to PubMed:9860982.

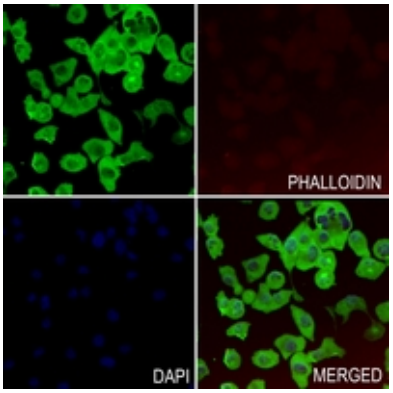
Images



Western blot analysis of PRKX expression in SP20 (A), EC9706 (B), HEK293T (C) whole cell lysates. (Predicted band size: 40 kD; Observed band size: 41 kD)



Immunohistochemical analysis of PRKX staining in human breast cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of PRKX staining in PANC1 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.