

PRKX Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7940a**Specification**

PRKX Antibody (C-term) - Product Information

Application	IHC-P,E
Primary Accession	P51817
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Antigen Region	312-343

PRKX Antibody (C-term) - Additional Information**Gene ID** 5613**Other Names**

cAMP-dependent protein kinase catalytic subunit PRKX, PrKX, Protein kinase X, Protein kinase X-linked, Serine/threonine-protein kinase PRKX, Protein kinase PKX1, PRKX, PKX1

Target/Specificity

This PRKX antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 312-343 amino acids from the C-terminal region of human PRKX.

Dilution

IHC-P~~1:10~50

Format

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

PRKX Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

PRKX Antibody (C-term) - 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

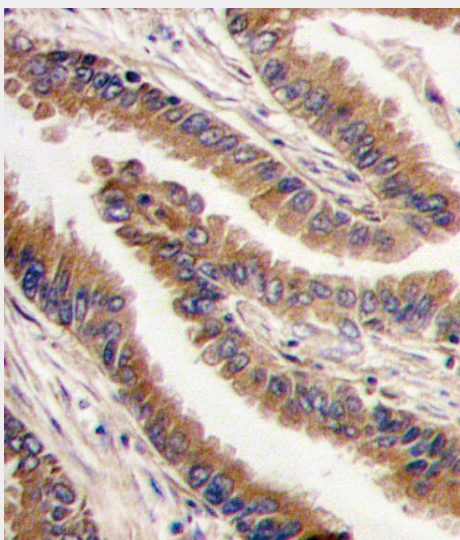
Tissue Location

Widely expressed (at protein level). Specifically expressed in blood by macrophages and granulocytes according to PubMed:9860982.

PRKX Antibody (C-term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

PRKX Antibody (C-term) - Images

Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with PRKX antibody (C-term), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

PRKX Antibody (C-term) - Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the γ phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic

mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The AGC kinase group consists of 63 kinases including the cyclic nucleotide-regulated protein kinase (PKA & PKG) family, the diacylglycerol-activated/phospholipid-dependent protein kinase C (PKC) family, the related to PKA and PKC (RAC/Akt) protein kinase family, the kinases that phosphorylate G protein-coupled receptors family (ARK), and the kinases that phosphorylate ribosomal protein S6 family (RSK). The calcium/calmodulin-dependent kinase (CAMK) group consists of 75 kinases regulated by Ca^{2+} /CaM and close relative family (CAMK, CAMKL, DAPK, MAPKAPK).

PRKX Antibody (C-term) - References

Li, X., et al., Proc. Natl. Acad. Sci. U.S.A. 99(14):9260-9265 (2002).
Klink, A., et al., Hum. Mol. Genet. 4(5):869-878 (1995).

PRKX Antibody (C-term) - Citations

- [PRKX critically regulates endothelial cell proliferation, migration, and vascular-like structure formation.](#)