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PI3KC2B Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8011a

Product Information

Application	WB, IHC-P, E
Primary Accession	O00750
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB01687
Calculated MW	184768
Antigen Region	120-150

Additional Information

Gene ID	5287
Other Names	Phosphatidylinositol 4-phosphate 3-kinase C2 domain-containing subunit beta, PI3K-C2-beta, PtdIns-3-kinase C2 subunit beta, C2-PI3K, Phosphoinositide 3-kinase-C2-beta, PIK3C2B
Target/Specificity	This PI3KC2B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 120-150 amino acids from the N-terminal region of human PI3KC2B.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
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	PI3KC2B Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PIK3C2B
Function	Phosphorylates PtdIns and PtdIns4P with a preference for PtdIns (PubMed:10805725, PubMed:11533253, PubMed:9830063). Does not phosphorylate PtdIns(4,5)P2 (PubMed:9830063). May be involved in EGF and

PDGF signaling cascades (PubMed:10805725).

Cellular Location Microsome. Cell membrane. Cytoplasm, cytosol Nucleus. Endoplasmic reticulum. Note=Found mostly in the microsome, but also in the plasma membrane and cytosol. Nuclear in testis

Tissue Location Expressed in columnar and transitional epithelia, mononuclear cells, and ganglion cells (at protein level). Widely expressed, with highest levels in thymus and placenta and lowest in peripheral blood, skeletal muscle and kidney

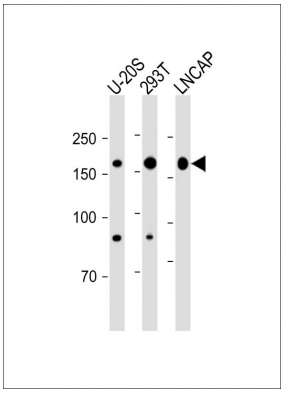
Background

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the g 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.

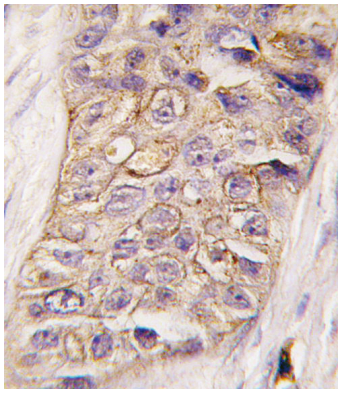
References

Arcaro, A., et al., J. Biol. Chem. 273(49):33082-33090 (1998).
Brown, R.A., et al., Biochem. Biophys. Res. Commun. 233(2):537-544 (1997).

Images



All lanes: Anti-PI3KC2B Antibody (N-term) at 1:1000 dilution Lane 1: U-20S whole cell lysate Lane 1: 293T whole cell lysate Lane 1: LNCAP whole cell lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 184 KDa Blocking/Dilution buffer: 5% NFDM/TBST.



Formalin-fixed and paraffin-embedded human breast carcinoma tissue reacted with PI3KC2B antibody (N-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.