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

PIK4CB Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6948c

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	Q9UBF8
Other Accession	O08561, Q8BKC8, Q49GP3, O02810
Reactivity	Human
Predicted	Mouse, Rat, Zebrafish, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB18563
Calculated MW	91379
Antigen Region	519-548

Additional Information

Gene ID	5298
Other Names	Phosphatidylinositol 4-kinase beta, PI4K-beta, PI4Kbeta, PtdIns 4-kinase beta, NPIK, PI4K92, PI4KB, PIK4CB
Target/Specificity	This PIK4CB antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 519-548 amino acids from the Central region of human PIK4CB.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
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	PIK4CB Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PI4KB (HGNC:8984)
Synonyms	PIK4CB

Function	Phosphorylates phosphatidylinositol (PI) in the first committed step in the production of the second messenger inositol- 1,4,5,-trisphosphate (PIP). May regulate Golgi disintegration/reorganization during mitosis, possibly via its phosphorylation. Involved in Golgi-to-plasma membrane trafficking (By similarity) (PubMed:10559940, PubMed:11277933, PubMed:12749687, PubMed:9405935). May play an important role in the inner ear development.
Cellular Location	Endomembrane system. Mitochondrion outer membrane; Peripheral membrane protein. Rough endoplasmic reticulum membrane; Peripheral membrane protein. Golgi apparatus. Golgi apparatus membrane. Cytoplasm, perinuclear region. Note=Found in the outer membrane of mitochondria and membranes of the rough endoplasmic reticulum. Recruited to the Golgi complex by the small GTPase ARF to stimulate the synthesis of phosphatidylinositol 4,5- bisphosphate (PIP2) on the Golgi complex. Recruited to the Golgi apparatus membrane by ACBD3 (PubMed:24672044, PubMed:27009356, PubMed:28289207). GGA2 is also involved in the recruitment (PubMed:28289207).
Tissue Location	Widely expressed with highest levels in heart, skeletal muscle, pancreas, testis and ovary. Weakly expressed in liver (PubMed:9020160, PubMed:9405935, PubMed:9405938). Expressed in the innear ear in the epithelium of the spinal organ of corti

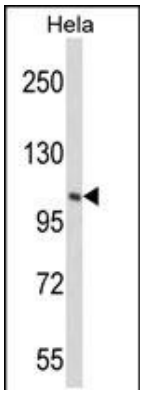
Background

PIK4CB phosphorylates phosphatidylinositol (PI) in the first committed step in the production of the second messenger inositol-1,4,5,-trisphosphate (PIP). It may regulate Golgi disintegration/reorganization during mitosis, possibly via its phosphorylation.

References

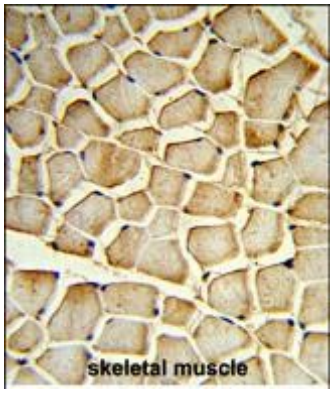
Jeganathan,S., et.al., Mol. Cell. Biol. 28 (14), 4549-4561 (2008) Pizarro-Cerda,J., et.al., Cell. Microbiol. 9 (10), 2381-2390 (2007)

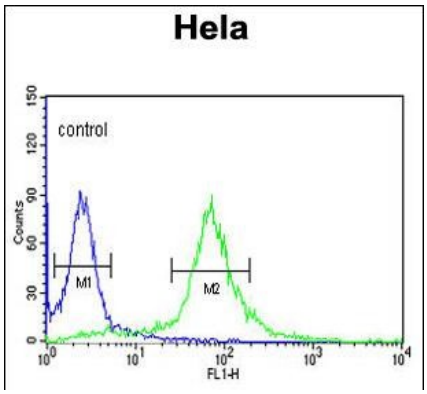
Images



Western blot analysis of PIK4CB Antibody (Center) (Cat. #AP6948c) in Hela cell line lysates (35ug/lane). PIK4CB (arrow) was detected using the purified Pab.

Formalin-fixed and paraffin-embedded human skeletal muscle reacted with PIK4CB Antibody (Center), 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.





PIK4CB Antibody (Center) (Cat. #AP6948c) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.