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PI3KR4 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP8026a

Product Information

Application	WB, IHC-P, E
Primary Accession	Q99570
Other Accession	NP_055417
Reactivity	Human
Predicted	Mouse, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB1721
Calculated MW	153103
Antigen Region	53-83

Additional Information

Gene ID	30849
Other Names	Phosphoinositide 3-kinase regulatory subunit 4, PI3-kinase regulatory subunit 4, PI3-kinase p150 subunit, Phosphoinositide 3-kinase adaptor protein, PIK3R4
Target/Specificity	This PI3KR4 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 53-83 amino acids from the N-terminal region of human PI3KR4.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (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	PI3KR4 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PIK3R4
Synonyms	VPS15 {ECO:0000303|PubMed:23878393}

Function	Regulatory subunit of the PI3K complex that mediates formation of phosphatidylinositol 3-phosphate; different complex forms are believed to play a role in multiple membrane trafficking pathways: PI3KC3-C1 is involved in initiation of autophagosomes and PI3KC3-C2 in maturation of autophagosomes and endocytosis. Involved in regulation of degradative endocytic trafficking and cytokinesis, probably in the context of PI3KC3-C2 (PubMed:20643123).
Cellular Location	Late endosome. Cytoplasmic vesicle, autophagosome. Membrane; Lipid-anchor. Note=As component of the PI3K complex I localized to pre-autophagosome structures. As component of the PI3K complex II localized predominantly to endosomes. Localizes also to discrete punctae along the ciliary axoneme (By similarity) {ECO:0000250|UniProtKB:Q8VD65, ECO:0000305}
Tissue Location	Ubiquitously expressed.

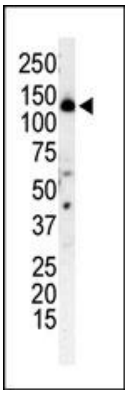
Background

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

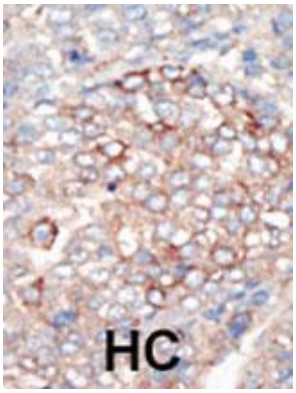
Panaretou, C., et al., J. Biol. Chem. 272(4):2477-2485 (1997).

Images



Western blot analysis of anti-PI3KR4 Pab (Cat. #AP8026a) in T-47D cell lysate. PI3KR4 (arrow) was detected using purified Pab. Secondary HRP-anti-rabbit was used for signal visualization with chemiluminescence.

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, 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. BC = breast carcinoma; HC = hepatocarcinoma.



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