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PDCD6IP Antibody (Center)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19973c

Product Information

Application	WB, E
Primary Accession	Q8WUM4
Other Accession	NP_037506.2
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB41924
Calculated MW	96023
Antigen Region	541-570

Additional Information

Gene ID	10015
Other Names	Programmed cell death 6-interacting protein, PDCD6-interacting protein, ALG-2-interacting protein 1, ALG-2-interacting protein X, Hp95, PDCD6IP, AIP1, ALIX, KIAA1375
Target/Specificity	This PDCD6IP antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 541-570 amino acids from the Central region of human PDCD6IP.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. 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	PDCD6IP Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PDCD6IP (HGNC:8766)
Synonyms	AIP1, ALIX, KIAA1375

Function	Multifunctional protein involved in endocytosis, multivesicular body biogenesis, membrane repair, cytokinesis, apoptosis and maintenance of tight junction integrity. Class E VPS protein involved in concentration and sorting of cargo proteins of the multivesicular body (MVB) for incorporation into intralumenal vesicles (ILVs) that are generated by invagination and scission from the limiting membrane of the endosome. Binds to the phospholipid lysobisphosphatidic acid (LBPA) which is abundant in MVBs internal membranes. The MVB pathway requires the sequential function of ESCRT-O, -I,-II and -III complexes (PubMed:14739459). The ESCRT machinery also functions in topologically equivalent membrane fission events, such as the terminal stages of cytokinesis (PubMed:17556548, PubMed:17853893). Adapter for a subset of ESCRT-III proteins, such as CHMP4, to function at distinct membranes. Required for completion of cytokinesis (PubMed:17556548, PubMed:17853893, PubMed:18641129). May play a role in the regulation of both apoptosis and cell proliferation. Regulates exosome biogenesis in concert with SDC1/4 and SDCBP (PubMed:22660413). By interacting with F-actin, PARD3 and TJP1 secures the proper assembly and positioning of actomyosin-tight junction complex at the apical sides of adjacent epithelial cells that defines a spatial membrane domain essential for the maintenance of epithelial cell polarity and barrier (By similarity).
Cellular Location	Cytoplasm, cytosol {ECO:0000250|UniProtKB:Q9QZA2}. Melanosome. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Secreted, extracellular exosome. Cell junction, tight junction {ECO:0000250|UniProtKB:Q9WU78}. Midbody, Midbody ring Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Colocalized with CEP55 at centrosomes of non-dividing cells. Component of the actomyosin-tight junction complex (By similarity). PDCD6IP targeting to the midbody requires the interaction with CEP55 (PubMed:18641129). {ECO:0000250|UniProtKB:Q9QZA2, ECO:0000250|UniProtKB:Q9WU78, ECO:0000269|PubMed:17081065, ECO:0000269|PubMed:17556548, ECO:0000269|PubMed:17853893, ECO:0000269|PubMed:18641129}

Background

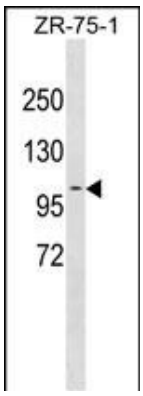
This gene encodes a protein thought to participate in programmed cell death. Studies using mouse cells have shown that overexpression of this protein can block apoptosis. In addition, the product of this gene binds to the product of the PDCD6 gene, a protein required for apoptosis, in a calcium-dependent manner. This gene product also binds to endophilins, proteins that regulate membrane shape during endocytosis. Overexpression of this gene product and endophilins results in cytoplasmic vacuolization, which may be partly responsible for the protection against cell death. Several alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq].

References

Shi, X., et al. Biochem. J. 431(1):93-102(2010)
Irie, T., et al. Virology 405(2):334-341(2010)
Sette, P., et al. J. Virol. 84(16):8181-8192(2010)
Rose, J.E., et al. Mol. Med. 16 (7-8), 247-253 (2010) :
Inuzuka, T., et al. BMC Struct. Biol. 10, 25 (2010) :

Images

PDCD6IP Antibody (Center) (Cat. #AP19973c) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the PDCD6IP antibody detected the



PDCD6IP protein (arrow).