

PDCD6IP Blocking Peptide (Center)
Synthetic peptide
Catalog # BP19973c**Specification**

PDCD6IP Blocking Peptide (Center) - Product Information

Primary Accession [O8WUM4](#)
Other Accession [NP_037506.2](#)

PDCD6IP Blocking Peptide (Center) - 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

The synthetic peptide sequence is selected from aa 556-570 of HUMAN PDCD6IP

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PDCD6IP Blocking Peptide (Center) - 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 intraluminal 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:17853893, PubMed:17556548). Adapter for a

subset of ESCRT-III proteins, such as CHMP4, to function at distinct membranes. Required for completion of cytokinesis (PubMed:17853893, PubMed:17556548, 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}

PDCD6IP Blocking Peptide (Center) - Protocols

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

- [Blocking Peptides](#)

PDCD6IP Blocking Peptide (Center) - Images

PDCD6IP Blocking Peptide (Center) - 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].

PDCD6IP Blocking Peptide (Center) - 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) :
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