

Anti-ALIX Picoband Antibody

Catalog # ABO12456

Specification

Anti-ALIX Picoband Antibody - Product Information

Application **WB Primary Accession Q8WUM4** Host Rabbit Reactivity Human, Mouse, Rat Clonality Polyclonal Format Lyophilized Description Rabbit IgG polyclonal antibody for Programmed cell death 6-interacting protein(PDCD6IP) detection. Tested with WB in Human; Mouse; Rat.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-ALIX Picoband Antibody - 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

Calculated MW 96023 MW KDa

Application Details Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

Subcellular Localization

Cytoplasm, cytosol . Melanosome . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Secreted, exosome . Identified by mass spectrometry in melanosome fractions from stage I to stage IV. Colocalized with CEP55 in the midbody during cytokinesis. Colocalized with CEP55 at centrosomes of non-dividing cells. .

Protein Name Programmed cell death 6-interacting protein

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

Immunogen

E.coli-derived human ALIX recombinant protein (Position: A2-D330). Human ALIX shares 96.7% and 95.2% amino acid (aa) sequence identity with mouse and rat ALIX, respectively.

Purification



Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins.

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Anti-ALIX Picoband Antibody - 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}

Anti-ALIX Picoband Antibody - Protocols



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

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-ALIX Picoband Antibody - Images

Anti- ALIX Picoband antibody, ABO12456, Western blottingAll lanes: Anti ALIX (ABO12456) at 0.5ug/mlLane 1: Rat Testis Tissue Lysate at 50ugLane 2: Mouse Testis Tissue Lysate at 50ugLane 3: A375 Whole Cell Lysate at 40ugLane 4: HELA Whole Cell Lysate at 40ugPredicted bind size: 96KDObserved bind size: 96KD

Anti-ALIX Picoband Antibody - Background

Programmed cell death 6-interacting protein is a protein that in humans is encoded by the PDCD6IP gene. This gene encodes a protein that functions within the ESCRT pathway in the abscission stage of cytokinesis, in intralumenal endosomal vesicle formation, and in enveloped virus budding. 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.