

CHMP1A Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58133

Product Information

Application IHC-P, IHC-F, IF

Primary Accession Q9HD42

Reactivity Rat, Pig, Dog, Bovine

Host Rabbit
Clonality Polyclonal
Calculated MW 21703
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human CHMP1A

Epitope Specificity 51-150/196

Isotype IgG

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm. Endosome membrane; Peripheral membrane protein. Nucleus

matrix.

SIMILARITY Belongs to the SNF7 family.

SUBUNIT Probable peripherally associated component of theendosomal sorting

required for transport complex III (ESCRT-III).ESCRT-III components are thought to multimerize to form a flatlattice on the perimeter membrane of the endosome. Several assemblyforms of ESCRT-III may exist that interact and act sequentally.Self-associates. Interacts with CHMP1B. Interacts with VPS4A.Interacts with VPS4B. Interacts with PHF1. Interacts with IST1.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions Component of the ESCRT-III complex, which is required for multivesicular

bodies (MVBs) formation and sorting of endosomal cargo proteins into MVBs. The MVB pathway mediates delivery of transmembrane proteins into the lumen of the lysosome for degradation. The ESCRT-III complex is probably involved in the concentration of MVB cargo. May also be involved in chromosome condensation. Targets the Polycomb group (PcG) protein PCGF4/BMI1 to regions of condensed chromatin. May play a role in stable cell cycle progression and in PcG gene silencing. In case of infection, the HIV-1

virus takes advantage of the ESCRT-III complex for budding and exocytic

cargoes of viral proteins.

Additional Information

Gene ID 5119

Other Names Charged multivesicular body protein 1a, Chromatin-modifying protein 1a,

CHMP1a, Vacuolar protein sorting-associated protein 46-1, Vps46-1, hVps46-1,

CHMP1A

Target/Specificity Expressed in placenta, cultured skin fibroblasts and in osteoblast cell line

MG63.

Dilution IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500

Format 0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Function

Name CHMP1A

> Probable peripherally associated component of the endosomal sorting required for transport complex III (ESCRT-III) which is involved in multivesicular bodies (MVBs) formation and sorting of endosomal cargo proteins into MVBs. MVBs contain intraluminal vesicles (ILVs) that are generated by invagination and scission from the limiting membrane of the endosome and mostly are delivered to lysosomes enabling degradation of membrane proteins, such as stimulated growth factor receptors, lysosomal enzymes and lipids. The MVB pathway appears to require the sequential function of ESCRT-O, -I,-II and -III complexes. ESCRT-III proteins mostly dissociate from the invaginating membrane before the ILV is released. The ESCRT machinery also functions in topologically equivalent membrane fission events, such as the terminal stages of cytokinesis and the budding of enveloped viruses (HIV-1 and other lentiviruses). ESCRT-III proteins are believed to mediate the necessary vesicle extrusion and/or membrane fission

> dividing cells. May also be involved in chromosome condensation. Targets the Polycomb group (PcG) protein BMI1/PCGF4 to regions of condensed chromatin. May play a role in stable cell cycle progression and in PcG gene

activities, possibly in conjunction with the AAA ATPase VPS4. Involved in cytokinesis. Involved in recruiting VPS4A and/or VPS4B to the midbody of

silencing.

Cellular Location Cytoplasm. Endosome membrane; Peripheral membrane protein. Nucleus

matrix. Note=The cytoplasmic form is partially membrane-associated and localizes to early endosomes. The nuclear form remains associated with the chromosome scaffold during mitosis. On overexpression, it localizes to nuclear bodies characterized by nuclease-resistant condensed chromatin

Tissue Location Expressed in placenta, cultured skin fibroblasts and in osteoblast cell line

MG-63.

Images

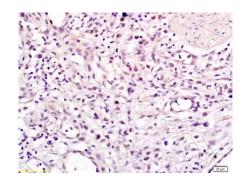
Tissue/cell: human gastric carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

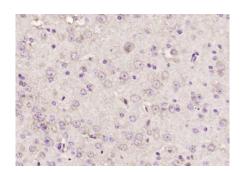
Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal

goat serum, C-0005) at 37°C for 20 min;

Incubation: Anti-CHMP1A Polyclonal Antibody,

Unconjugated(AP58133) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and





Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (CHMP1A) Polyclonal Antibody, Unconjugated (AP58133) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.