

CHMP3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP21033a

Specification

CHMP3 Antibody (N-term) - Product Information

Application WB,E
Primary Accession O9Y3E7

Other Accession <u>Q8CGS4</u>, <u>Q9CQ10</u>, <u>Q4R574</u>, <u>Q58CS7</u>

Reactivity Human, Mouse Predicted Bovine, Monkey, Rat

Host Rabbit
Clonality Polyclonal
Isotype Rabbit IgG
Calculated MW 25073

CHMP3 Antibody (N-term) - Additional Information

Gene ID 100526767;51652

Other Names

Charged multivesicular body protein 3, Chromatin-modifying protein 3, Neuroendocrine differentiation factor, Vacuolar protein sorting-associated protein 24, hVps24, CHMP3, CGI149, NEDF, VPS24

Target/Specificity

This CHMP3 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 28-61 amino acids from the N-terminal region of human CHMP3.

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

CHMP3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CHMP3 Antibody (N-term) - Protein Information

Name CHMP3



Synonyms CGI149, NEDF, VPS24

Function Probable core 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 activities, possibly in conjunction with the AAA ATPase VPS4. Selectively binds to phosphatidylinositol 3,5-bisphosphate PtdIns(3,5)P2 and PtdIns(3,4)P2 in preference to other phosphoinositides tested. Involved in late stages of cytokinesis. Plays a role in endosomal sorting/trafficking of EGF receptor. Isoform 2 prevents stress-mediated cell death and accumulation of reactive oxygen species when expressed in yeast cells.

Cellular Location

Cytoplasm, cytosol. Membrane; Lipid-anchor. Endosome. Late endosome membrane. Note=Localizes to the midbody of dividing cells

Tissue Location

Widely expressed. Expressed in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas

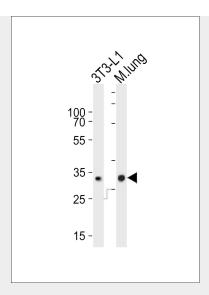
CHMP3 Antibody (N-term) - Protocols

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

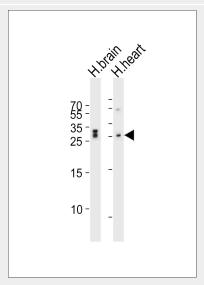
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CHMP3 Antibody (N-term) - Images





Western blot analysis of lysates from mouse 3T3-L1 cell line and mouse lung tissue (from left to right), using CHMP3 Antibody (N-term)(Cat. #AP21033a). AP21033a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.



Western blot analysis of lysates from human brain and human heart tissue lysate (from left to right), using CHMP3 Antibody (N-term)(Cat. #AP21033a). AP21033a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysates at 20ug per lane.

CHMP3 Antibody (N-term) - Background

Probable core 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





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CHMP3 Antibody (N-term) - References

Wilson E.M., et al.J. Clin. Endocrinol. Metab. 86:4504-4511(2001). Yan Q.,et al.Exp. Cell Res. 304:265-273(2005). Kemmer D., et al.BMC Genomics 7:48-48(2006). Khoury C.M., et al. Gene 391:233-241(2007). Lai C.-H., et al. Genome Res. 10:703-713(2000).