

CHMP3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5420

Product Information

Application WB Primary Accession Q9Y3E7

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

Reactivity Human, Mouse

Predicted Rat
Host Rabbit
Clonality Polyclonal
Calculated MW 25073
Isotype Rabbit IgG
Antigen Source HUMAN

Additional Information

Gene ID 100526767;51652

Antigen Region 28-61

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

Dilution WB~~1:1000

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.

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.

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

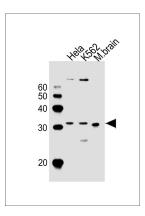
Background

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 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.

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).

Images



All lanes: Anti-CHMP3 Antibody (N-term) at 1:1000 dilution Lane 1: Hela whole cell lysates Lane 2: K562 whole cell lysates Lane 3: mouse brain lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size: 25 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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