

# CHMP3 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AW5420

### Specification

# CHMP3 Antibody (N-term) - Product Information

Application Primary Accession Other Accession Reactivity Predicted Host Clonality Calculated MW Isotype Antigen Source WB,E <u>O9Y3E7</u> <u>O8CGS4</u>, <u>O9CO10</u>, <u>O4R574</u>, <u>O58CS7</u> Human, Mouse Bovine, Monkey, Rat Rabbit Polyclonal H=25,28,21;M=25;R=25 KDa Rabbit IgG HUMAN

## CHMP3 Antibody (N-term) - 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.

# **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

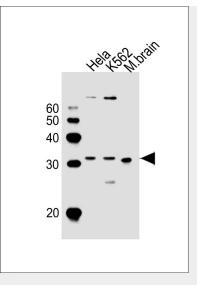
### CHMP3 Antibody (N-term) - Protocols

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

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

### CHMP3 Antibody (N-term) - 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  $\mu$ g 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.

# 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 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.

# 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).