

## **CHMP1A Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP58133

# **Specification**

# **CHMP1A Polyclonal Antibody - Product Information**

Application IHC-P, IHC-F, IF

Primary Accession Q9HD42

Reactivity
Host
Clonality
Calculated MW
Physical State

Rat, Pig, Dog, Bovine
Rabbit
Polyclonal
22 KDa
Liquid

Immunogen KLH conjugated synthetic peptide derived

laG

from human CHMP1A

Epitope Specificity 51-150/196

Isotype
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.



# **CHMP1A Polyclonal Antibody - 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

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \> <span class = "dilution\_IHC-F">IHC-F~~N/A</span><br \> <span class = "dilution\_IF">IF~~1:50~200</span>

#### 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.

# **CHMP1A Polyclonal Antibody - Protein Information**

#### Name CHMP1A

#### **Function**

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

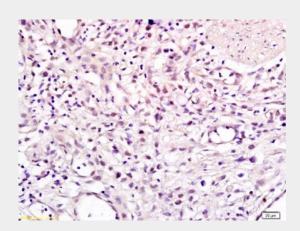
## **CHMP1A Polyclonal Antibody - Protocols**



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

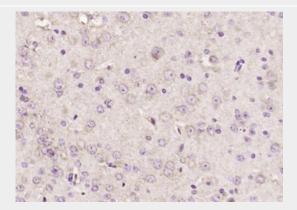
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

## CHMP1A Polyclonal Antibody - 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(bs-4207R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



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 (bs-4207R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.