

CHMP1A (K-17): sc-49904

BACKGROUND

The charged multivesicular body proteins or chromatin modifying proteins, commonly designated CHMPs, belong to the vacuolar sorting protein family and function as chromatin-modifying proteins. CHMP1-6 are all components of ESCRT (endosomal sorting complex required for transport) I, II or III complexes. These complexes are crucial for sorting endosomal articles into multivesicular bodies (MVBs) and are also required for the formation of these bodies. CHMP1 interacts with VPS4B and localizes to early endosomes. Two isoforms, encoded by distinct genes, exist for CHMP1. They are designated CHMP1A and CHMP1B. CHMP1 overexpression can lead to the dilation of endosomal compartments resulting in the disruption of normal distribution of endosomal markers.

REFERENCES

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3. Yang, K.S., Jin, U.H., Kim, J., Song, K., Kim, S.J., Hwang, I., Lim, Y.P. and Pai, H.S. 2004. Molecular characterization of NbCHMP1 encoding a homolog of human CHMP1 in *Nicotiana benthamiana*. *Mol. Cells* 17: 255-261.
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5. Horii, M., Shibata, H., Kobayashi, R., Katoh, K., Yorikawa, C., Yasuda, J. and Maki, M. 2006. CHMP7, a novel ESCRT-III-related protein, associates with CHMP4B and functions in the endosomal sorting pathway. *Biochem. J.* 400: 23-32.

CHROMOSOMAL LOCATION

Genetic locus: PCOLN3 (human) mapping to 16q24.3; Pcoln3 (mouse) mapping to 8 E1.

SOURCE

CHMP1A (K-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CHMP1A of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-49904 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

For research use only, not for use in diagnostic procedures.

APPLICATIONS

CHMP1A (K-17) is recommended for detection of CHMP1A of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CHMP1A (K-17) is also recommended for detection of CHMP1A in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for CHMP1A siRNA (h): sc-60367, CHMP1A siRNA (m): sc-60368, CHMP1A shRNA Plasmid (h): sc-60367-SH, CHMP1A shRNA Plasmid (m): sc-60368-SH, CHMP1A shRNA (h) Lentiviral Particles: sc-60367-V and CHMP1A shRNA (m) Lentiviral Particles: sc-60368-V.

Molecular Weight of CHMP1A: 35 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.


 MONOS
 Satisfation
 Guaranteed

Try **CHMP1A (B-5): sc-271617**, our highly recommended monoclonal alternative to CHMP1A (K-17).