

CHMP6 (K-13): sc-49922

BACKGROUND

The charged multivesicular body 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), as well as required for the formation of these bodies. During HIV-1 infection, the virus uses the ESCRT-III complex to mediate budding and exocytosis of viral proteins. CHMP6, also known as VPS20, interacts with CHMP4 of the ESCRT-III complex. CHMP6 also interacts with SNF8, VPS25 and Vps36 of the ESCRT-II complex, where it regulates cargo sorting by acting as an acceptor for ESCRT-II on endosome membranes.

REFERENCES

1. von Schwedler, U.K., Stuchell, M., Müller, B., Ward, D.M., Chung, H.Y., Morita, E., Wang, H.E., Davis, T., He, G.P., Cimbora, D.M., Scott, A., Kräusslich, H.G., Kaplan, J., Morham, S.G. and Sundquist, W.I. 2003. The protein network of HIV budding. *Cell* 114: 701-713.
2. Yorikawa, C., Shibata, H., Waguri, S., Hatta, K., Horii, M., Katoh, K., Kobayashi, T., Uchiyama, Y. and Maki, M. 2005. Human CHMP6, a myristoylated ESCRT-III protein, interacts directly with an ESCRT-II component EAP20 and regulates endosomal cargo sorting. *Biochem. J.* 387: 17-26.
3. Langelier, C., von Schwedler, U.K., Fisher, R.D., De Domenico, I., White, P.L., Hill, C.P., Kaplan, J., Ward, D. and Sundquist, W.I. 2006. Human ESCRT-II complex and its role in human immunodeficiency virus type 1 release. *J. Virol.* 80: 9465-9480.

CHROMOSOMAL LOCATION

Genetic locus: CHMP6 (human) mapping to 17q25.3; Chmp6 (mouse) mapping to 11 E2.

SOURCE

CHMP6 (K-13) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of CHMP6 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-49922 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

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.

APPLICATIONS

CHMP6 (K-13) is recommended for detection of CHMP6 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).

CHMP6 (K-13) is also recommended for detection of CHMP6 in additional species, including canine.

Suitable for use as control antibody for CHMP6 siRNA (h): sc-60376, CHMP6 siRNA (m): sc-60377, CHMP6 shRNA Plasmid (h): sc-60376-SH, CHMP6 shRNA Plasmid (m): sc-60377-SH, CHMP6 shRNA (h) Lentiviral Particles: sc-60376-V and CHMP6 shRNA (m) Lentiviral Particles: sc-60377-V.

Molecular Weight (predicted) of CHMP6: 23 kDa.

Molecular Weight (observed) of CHMP6: 37 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.

RESEARCH USE

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



Try **CHMP6 (B-3): sc-398963**, our highly recommended monoclonal alternative to CHMP6 (K-13).