

# CHMP2 (C-17): sc-49905

## 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), and are also required for the formation of these bodies. CHMP2, also known as BC-2, associates directly with Vps4 for the disassembly of ESCRT-III complex in an ATP-dependant manner. During HIV-1 infection, the virus uses the ESCRT-III complex to mediate budding and exocytosis of viral proteins. Overexpression of CHMP2 strongly inhibits HIV-1 release.

## 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. Suo, Y.P., Wang, B.Y., Hong, Z., Yin, R.T., Wang, D.Q. and Peng, Z.L. 2006. Comparative study of that synergistic effect of cisplatin combined with compound herbal medicinal prescription for tonic quality and activating blood circulation is on SKOV3 cell proliferation and apoptosis. *Sichuan Da Xue Xue Bao Yi Xue Ban* 37: 542-546.
3. Agromayor, M. and Martin-Serrano, J. 2006. Interaction of AMSH with ESCRT-III and deubiquitination of endosomal cargo. *J. Biol. Chem.* 281: 23083-23091.

## CHROMOSOMAL LOCATION

Genetic locus: CHMP2A (human) mapping to 19q13.43; Chmp2a (mouse) mapping to 7 A1.

## SOURCE

CHMP2 (C-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of CHMP2 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-49905 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](http://www.scbt.com) or our catalog for detailed protocols and support products.

## APPLICATIONS

CHMP2 (C-17) is recommended for detection of CHMP2 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

CHMP2 (C-17) is also recommended for detection of CHMP2 in additional species, including equine, canine, bovine and porcine.

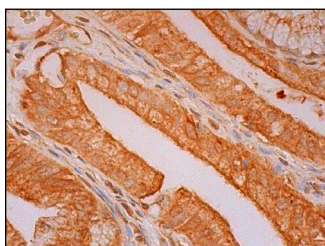
Suitable for use as control antibody for CHMP2 siRNA (h): sc-60369, CHMP2 siRNA (m): sc-60370, CHMP2 shRNA Plasmid (h): sc-60369-SH, CHMP2 shRNA Plasmid (m): sc-60370-SH, CHMP2 shRNA (h) Lentiviral Particles: sc-60369-V and CHMP2 shRNA (m) Lentiviral Particles: sc-60370-V.

Molecular Weight of CHMP2: 24 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

## DATA



CHMP2 (C-17): sc-49905. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic and nuclear staining of glandular cells.

## RESEARCH USE

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