

CHMP5 (m): 293T Lysate: sc-125133

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 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. CHMP5 interacts directly with LIP5, a protein required for HIV release. Depletion of LIP5 will reduce HIV-1 budding, whereas a depletion of CHMP5 will increase HIV-1 release. Subsequently, overexpression of CHMP5 will reduce HIV-1 budding. CHMP5 also regulates late endosomal development downstream of MVB formation and a loss of CHMP5 will result in increased signal transduction due to a decrease in lysosomal degradation function.

REFERENCES

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2. Ward, D.M., Vaughn, M.B., Shiflett, S.L., White, P.L., Pollock, A.L., Hill, J., Schnegelberger, R., Sundquist, W.I. and Kaplan, J. 2005. The role of LIP5 and CHMP5 in multivesicular body formation and HIV-1 budding in mammalian cells. *J. Biol. Chem.* 280: 10548-10555.
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CHROMOSOMAL LOCATION

Genetic locus: Chmp5 (mouse) mapping to 4 A5.

PRODUCT

CHMP5 (m): 293T Lysate represents a lysate of mouse CHMP5 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

CHMP5 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive CHMP5 antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

RESEARCH USE

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

PROTOCOLS

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