

COPE (m2): 293T Lysate: sc-119398

BACKGROUND

Membrane and vesicular trafficking in the early secretory pathway are mediated by non-Clathrin COP (coat protein) I-coated vesicles. COPI-coated vesicles mediate retrograde transport from the Golgi back to the ER and intra-Golgi transport. The cytosolic precursor of the COPI coat, the heptameric coatomer complex, is composed of two subcomplexes. The first consists of the COPB, COPG, COPD and COPZ subunits (also known as β -, γ -, δ - and ζ -COP, respectively), which are distantly homologous to AP Clathrin adaptor subunits. The second consists of the COPA, β' -COP and COPE subunits (also known as α -COP, COPP and ϵ -COP, respectively).

REFERENCES

1. Lowe, M. and Kreis, T.E. 1995. *In vitro* assembly and disassembly of coatomer. J. Biol. Chem. 270: 31364-31371.
2. Daro, E., et al. 1997. Inhibition of endosome function in CHO cells bearing a temperature-sensitive defect in the coatomer (COPI) component ϵ -COP. J. Cell Biol. 139: 1747-1759.
3. Harter, C. and Wieland, F.T. 1998. A single binding site for dilysine retrieval motifs and p23 within the γ subunit of coatomer. Proc. Natl. Acad. Sci. USA 95: 11649-11654.
4. Duden, R., et al. 1998. ϵ -COP is a structural component of coatomer that functions to stabilize α -COP. EMBO J. 17: 985-995.
5. Chow, C.W., et al. 1999. The epithelial Na⁺/H⁺ exchanger, NHE3, is internalized through a clathrin-mediated pathway. J. Biol. Chem. 274: 37551-37558.
6. Andersson, H., et al. 1999. Protein targeting to endoplasmic reticulum by dilysine signals involves direct retention in addition to retrieval. J. Biol. Chem. 274: 15080-15084.
7. Kimata, Y., et al. 2000. Impaired proteasome function rescues thermosensitivity of yeast cells lacking the coatomer subunit ϵ -COP. J Biol Chem 275: 10655-10660.

CHROMOSOMAL LOCATION

Genetic locus: Cope (mouse) mapping to 8 B3.3.

PRODUCT

COPE (m2): 293T Lysate represents a lysate of mouse COPE transfected 293T cells and is provided as 100 μ g protein in 200 μ l SDS-PAGE buffer.

APPLICATIONS

COPE (m2): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive COPE antibodies. Recommended use: 10-20 μ l per lane.

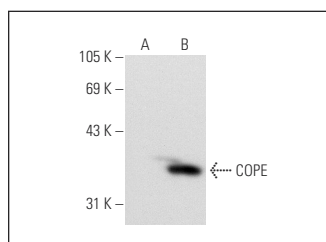
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

COPE (E-1): sc-166046 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse COPE expression in COPE transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker[™] Molecular Weight Standards: sc-2035, UltraCruz[®] Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



COPE (E-1): sc-166046. Western blot analysis of COPE expression in non-transfected: sc-117752 (A) and mouse COPE transfected: sc-119398 (B) 293T whole cell lysates.

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.