

COPE (h2): 293T Lysate: sc-159979

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 COB, COG, 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

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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. Duden, R., et al. 1998. ϵ -COP is a structural component of coatomer that functions to stabilize α -COP. EMBO J. 17: 985-995.
4. 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.
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6. 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.
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.
8. SWISS-PROT/TrEMBL (P48444). World Wide Web URL: <http://harvester.embl.de/harvester/P484/P48444.htm>

CHROMOSOMAL LOCATION

Genetic locus: COPE (human) mapping to 19p13.11.

PRODUCT

COPE (h2): 293T Lysate represents a lysate of human COPE transfected 293T cells and is provided as 100 μg protein in 200 μl SDS-PAGE buffer.

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.

PROTOCOLS

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

APPLICATIONS

COPE (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive COPE antibodies. Recommended use: 10-20 μl per lane.

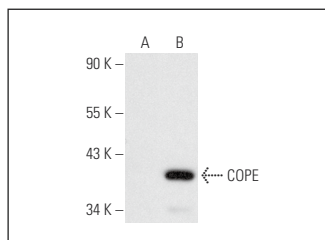
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

COPE (E-1): sc-166046 is recommended as a positive control antibody for Western Blot analysis of enhanced human 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 human COPE transfected: sc-159979 (B) 293T whole cell lysates.

RESEARCH USE

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