

# COPD (m2): 293T Lysate: sc-119394

## 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  $\beta$ -,  $\gamma$ -,  $\delta$ - and  $\zeta$ -COP, respectively), which are distantly homologous to AP Clathrin adaptor subunits. The second consists of the COPA,  $\beta'$ -COP and COPE subunits (also known as  $\alpha$ -COP, COPP and  $\epsilon$ -COP, respectively).

## REFERENCES

1. Lowe, M., et al. 1995. *In vitro* assembly and disassembly of coatomer. J. Biol. Chem. 270: 31364-31371.
2. Faulstich, D., et al. 1996. Architecture of coatomer: molecular characterization of  $\delta$ -COP and protein interactions within the complex. J. Cell Biol. 135: 53-61.
3. Tunnaclyffe, A., et al. 1996. The coatomer protein  $\delta$ -COP, encoded by the archain gene, is conserved across diverse eukaryotes. Mamm. Genome 7: 784-786.
4. Cosson, P., et al. 1996.  $\delta$ - and  $\zeta$ -COP, two coatomer subunits homologous to clathrin-associated proteins, are involved in ER retrieval. EMBO J. 15: 1792-1798.
5. Harter, C., et al. 1998. A single binding site for dilysine retrieval motifs and p23 within the  $\gamma$  subunit of coatomer. Proc. Natl. Acad. Sci. USA 95: 11649-11654.
6. Chaudhary, A., et al. 1998. Specific interaction of Golgi coatomer protein  $\alpha$ -COP with phosphatidylinositol 3,4,5-trisphosphate. J. Biol. Chem. 273: 8344-8350.
7. Futatsumori, M., et al. 2000. Identification and characterization of novel isoforms of COP1 subunits. J. Biochem. 128: 793-801.
8. Eugster, A., et al. 2004. The  $\alpha$ - and  $\beta'$ -COP WD40 domains mediate cargo-selective interactions with distinct di-lysine motifs. Mol. Biol. Cell 15: 1011-1023.
9. SWISS-PROT/TrEMBL (P48444). World Wide Web URL: <http://harvester.embl.de/harvester/P484/P48444.htm>

## CHROMOSOMAL LOCATION

Genetic locus: Arcn1 (mouse) mapping to 9 A5.2.

## PRODUCT

COPD (m2): 293T Lysate represents a lysate of mouse COPD transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l 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.

## APPLICATIONS

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

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

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.