**BACKGROUND**

Membrane and vesicular trafficking in the early secretory pathway are mediated by non-Clathrin COP (coat protein)-l-coated vesicles. COP-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 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, β1-COP and COPE subunits (also known as α-COP, COPP and η-COP, respectively).

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: ARCN1 (human) mapping to 11q23.3; Arcn1 (mouse) mapping to 9 A5-2.

**SOURCE**

COPD (A-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 377-401 near the C-terminus of COPD of human origin.

**PRODUCT**

Each vial contains 200 µg IgG κ antibody light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-514104 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

**APPLICATIONS**

COPD (A-3) is recommended for detection of COPD of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for COPD siRNA (h): sc-106917, COPD siRNA (m): sc-142502, COPD shRNA Plasmid (h): sc-106917-SH, COPD shRNA Plasmid (m): sc-142502-SH, COPD shRNA (h) Lentiviral Particles: sc-106917-V and COPD shRNA (m) Lentiviral Particles: sc-142502-V.

Molecular Weight of COPD: 57 kDa.

Positive Controls: COPD (m5): 293T Lysate: sc-119397, HeLa whole cell lysate: sc-2200 or NIH/3T3 whole cell lysate: sc-2210.

**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, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

COPD (A-3): sc-514104. Western blot analysis of COPD expression in non-transfected 293T: sc-117522 (A) mouse COPD transfected 293T: sc-119397 (B), NIH/3T3 (C), HeLa (D) and NCi-H1299 (E) whole cell lysates.

COPD (A-3): sc-514104. Western blot analysis of COPD expression in NIH/3T3 (A), ZR-75-1 (B), MCF7 (C), Jurkat (D) and PC-12 (E) whole cell lysates.

**STORAGE**

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

**RESEARCH USE**

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

**PROTOCOLS**

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