# COPD (W-20): sc-28515



The Power to Question

#### **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**

- Lowe, M., et al. 1995. In vitro assembly and dissembly of coatomer. J. Biol. Chem. 270: 31364-31371.
- Faulstich, D., et al. 1996. Architecture of coatomer: molecular characterization of δ-COP and protein interactions within the complex. J. Cell Biol. 135: 53-61.

#### CHROMOSOMAL LOCATION

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

## SOURCE

COPD (W-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of COPD of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-28515 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## **APPLICATIONS**

COPD (W-20) is recommended for detection of COPD of mouse, rat and human origin by Western Blotting (starting dilution 1:200, 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

COPD (W-20) is also recommended for detection of COPD in additional species, including equine, canine, bovine, porcine and avian.

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.

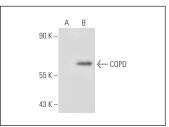
Molecular Weight of COPD: 57 kDa.

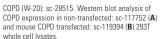
Positive Controls: COPD (m2): 293T Lysate: sc-119394 or NIH/3T3 whole cell lysate: sc-2210.

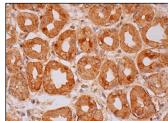
#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), 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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

#### **DATA**







COPD (W-20): sc-28515. Immunoperoxidase staining of formalin fixed, paraffin-embedded human upper stomach tissue showing cytoplasmic and membrane staining of glandular cells.

#### **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 web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **COPD (E-12):** sc-515549 or **COPD (A-3):** sc-514104, our highly recommended monoclonal alternatives to COPD (W-20).

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