## SANTA CRUZ BIOTECHNOLOGY, INC.

# COPE (H-80): sc-25561



### 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. and Kreis, T.E. 1995. In vitro assembly and dissembly 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  $\varepsilon$ -COP. J. Cell Biol. 139: 1747-1759.
- 3. Duden, R., et al. 1998.  $\epsilon$ -COP is a structural component of coatomer that functions to stabilize  $\alpha$ -COP. EMBO J. 17: 985-995.

#### CHROMOSOMAL LOCATION

Genetic locus: COPE (human) mapping to 19p13.11; Cope (mouse) mapping to 8 B3.3.

#### SOURCE

COPE (H-80) is a rabbit polyclonal antibody raised against amino acids 111-190 of COPE of human origin.

#### PRODUCT

Each vial contains 200 µg lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **APPLICATIONS**

COPE (H-80) is recommended for detection of COPE 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

COPE (H-80) is also recommended for detection of COPE in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for COPE siRNA (h): sc-41198, COPE siRNA (m): sc-41199, COPE shRNA Plasmid (h): sc-41198-SH, COPE shRNA Plasmid (m): sc-41199-SH, COPE shRNA (h) Lentiviral Particles: sc-41198-V and COPE shRNA (m) Lentiviral Particles: sc-41199-V.

Molecular Weight of COPE: 36 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, KNRK whole cell lysate: sc-2214 or COPE (m): 293 Lysate: sc-111288.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat antirabbit IgG-HRP: sc-2030 (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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



COPE (H-80): sc-25561. Western blot analysis of COPE expression in non-transfected 293: sc-110760 (A), mouse COPE transfected 293: sc-111288 (B), KNRK (C), MCF7 (D) and HeLa (E) whole cell lysates

#### SELECT PRODUCT CITATIONS

1. Dey, P., et al. 2012. Estrogen receptors  $\beta 1$  and  $\beta 2$  have opposing roles in regulating proliferation and bone metastasis genes in the prostate cancer cell line PC3. Mol. Endocrinol. 26: 1991-2003.

#### **STORAGE**

Store at 4° C, \*\*D0 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.

#### MONOS Satisfation COPE (H-80). Guaranteed

Try COPE (A-4): sc-133195 or COPE (C-4): sc-133194, our highly recommended monoclonal alternatives to