

β' -COP (V-19): sc-13332



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 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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- Lowe, M. and Kreis, T.E. 1995. *In vitro* assembly and disassembly of coatomer. J. Biol. Chem. 270: 31364-31371.
- Csukai, M., et al. 1997. The coatomer protein β' -COP, a selective binding protein (RACK) for protein kinase Cepsilon. J. Biol. Chem. 272: 29200-29206.
- 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.
- Vollenweider, F., et al. 1998. Mistargeting of the lectin ERGIC-53 to the endoplasmic reticulum of HeLa cells impairs the secretion of a lysosomal enzyme. J. Cell Biol. 142: 377-389.
- Tarsounas, M., et al. 1999. Identification of the mouse β' -COP Golgi component as a spermatocyte autoantigen in scleroderma and mapping of its gene Cspb2 to mouse chromosome 9. Cytogenet. Cell Genet. 87: 201-204.
- Crisponi, L., et al. 2004. FOXL2 inactivation by a translocation 171 kb away: analysis of 500 kb of chromosome 3 for candidate long-range regulatory sequences. Genomics 83: 757-764.

CHROMOSOMAL LOCATION

Genetic locus: COPB2 (human) mapping to 3q23; Cspb2 (mouse) mapping to 9 E3.3.

SOURCE

β' -COP (V-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of β' -COP of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-13332 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

β' -COP (V-19) is recommended for detection of β' -COP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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).

β' -COP (V-19) is also recommended for detection of β' -COP in additional species, including equine, bovine, porcine and avian.

Suitable for use as control antibody for β' -COP siRNA (h): sc-41200, β' -COP siRNA (m): sc-41201, β' -COP shRNA Plasmid (h): sc-41200-SH, β' -COP shRNA Plasmid (m): sc-41201-SH, β' -COP shRNA (h) Lentiviral Particles: sc-41200-V and β' -COP shRNA (m) Lentiviral Particles: sc-41201-V.

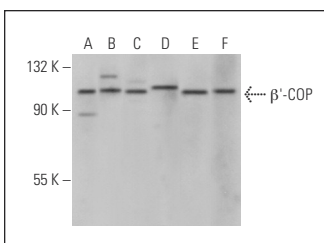
Molecular Weight of β' -COP: 102 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Hep G2 cell lysate: sc-2227 or RAW 264.7 whole cell lysate: sc-2211.

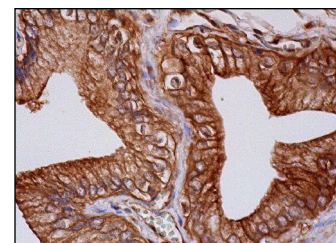
RECOMMENDED SECONDARY REAGENTS

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.

DATA



β' -COP (V-19): sc-13332. Western blot analysis of β' -COP expression in RAW 264.7 (A), HeLa (B), U-251-MG (C) and Hep G2 (D) whole cell lysates and mouse adrenal gland (E) and mouse stomach (F) tissue extracts.



β' Antibody (V-19): sc-13332. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder 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.