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COPB1 Antibody (Center) Blocking peptide
Synthetic peptide
Catalog # BP13904c

Specification

COPB1 Antibody (Center) Blocking peptide - Product Information

Primary Accession P53618

COPB1 Antibody (Center) Blocking peptide - Additional Information

Gene ID 1315

Other Names
Coatomer subunit beta, Beta-coat protein, Beta-COP, COPB1, COPB

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP13904c was selected from the Center region of COPB1. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

COPB1 Antibody (Center) Blocking peptide - Protein Information

Name COPB1 (HGNC:2231)

Synonyms COPB

Function
The coatomer is a cytosolic protein complex that binds to dilysine motifs and reversibly associates with Golgi non-clathrin- coated vesicles, which further mediate biosynthetic protein transport from the ER, via the Golgi up to the trans Golgi network. Coatomer complex is required for budding from Golgi membranes, and is essential for the retrograde Golgi-to-ER transport of dilysine-tagged proteins. In mammals, the coatomer can only be recruited by membranes associated to ADP-ribosylation factors (ARFs), which are small GTP-binding proteins; the complex also influences the Golgi structural integrity, as well as the processing, activity, and endocytic recycling of LDL receptors. Plays a functional role in facilitating the transport of kappa-type opioid receptor mRNAs into axons and enhances translation of these proteins. Required for limiting lipid storage in lipid droplets. Involved in lipid homeostasis by regulating the presence of perilipin family members PLIN2 and PLIN3 at the lipid droplet surface and promoting the association of adipocyte surface

triglyceride lipase (PNPLA2) with the lipid droplet to mediate lipolysis (By similarity). Involved in the Golgi disassembly and reassembly processes during cell cycle. Involved in autophagy by playing a role in early endosome function. Plays a role in organellar compartmentalization of secretory compartments including endoplasmic reticulum (ER)-Golgi intermediate compartment (ERGIC), Golgi, trans-Golgi network (TGN) and recycling endosomes, and in biosynthetic transport of CAV1. Promotes degradation of Nef cellular targets CD4 and MHC class I antigens by facilitating their trafficking to degradative compartments.

Cellular Location
Cytoplasm. Golgi apparatus membrane; Peripheral membrane protein; Cytoplasmic side Cytoplasmic vesicle, COPI-coated vesicle membrane; Peripheral membrane protein; Cytoplasmic side. Cell membrane. Endoplasmic reticulum-Golgi intermediate compartment {ECO:0000250|UniProtKB:Q9JIF7}. Note=The coatomer is cytoplasmic or polymerized on the cytoplasmic side of the Golgi, as well as on the vesicles/buds originating from it (By similarity) Proteolytic cleavage by CAPN8 triggers translocation from Golgi to cytoplasm (By similarity). Found in perinuclear vesicular-tubular clusters (VTCs) and in the Golgi region where associated with vesicles, buds and rims of the Golgi stack (By similarity). Occasionally present at the trans-side of Golgi, but mainly present at the cis-Golgi side in transitional areas (TA), on so-called peripheral elements (PE) consisting of tubules and vesicles located between the cup-shaped transitional elements (TE) of the rough endoplasmic reticulum (RER) and the cis-most Golgi cisternae (By similarity). Present in cytoplasm, not associated with visible coats or membranes, with a minor fraction present on small clusters of tubules and vesicles (By similarity). Some association with high-density and low-density microsomes and mitochondria/nuclei fraction (By similarity). Very little found in plasma membrane fraction (PubMed:20362547) {ECO:0000250|UniProtKB:P23514, ECO:0000269|PubMed:20362547}

COPB1 Antibody (Center) Blocking peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Blocking Peptides

COPB1 Antibody (Center) Blocking peptide - Images

COPB1 Antibody (Center) Blocking peptide - Background

This gene encodes a protein subunit of the coatomercomplex associated with non-clathrin coated vesicles. The coatomercomplex, also known as the coat protein complex 1, forms in thecytoplasm and is recruited to the Golgi by activated guanosinetriphosphatases. Once at the Golgi membrane, the coatomer complexmay assist in the movement of protein and lipid components back tothe endoplasmic reticulum. Alternatively spliced transcriptvariants have been described.

COPB1 Antibody (Center) Blocking peptide - References

Burman, J.L., et al. J. Biol. Chem. 283(33):22774-22786(2008)Lippincott-Schwartz, J., et al. Trends Cell Biol. 16 (10), E1-E4 (2006) :Huang, L., et al. Mol. Biol. Rep. 29(3):317-323(2002)Paulsson, K.M., et al. J. Biol. Chem. 277(21):18266-18271(2002)Sullivan, B.M., et al. Mol. Biol. Cell 11(9):3155-3168(2000)