




Product datasheet

Anti-beta COP antibody ab205020

[2 Images](#)

Overview

Product name	Anti-beta COP antibody
Description	Rabbit polyclonal to beta COP
Host species	Rabbit
Tested applications	Suitable for: WB, IP
Species reactivity	Reacts with: Mouse, Human Predicted to work with: Rat, Sheep, Rabbit, Chicken, Cow, Dog, Pig, Chimpanzee, Zebrafish, Gorilla 
Immunogen	Synthetic peptide within Human beta COP aa 850-950. The exact immunogen sequence used to generate this antibody is proprietary information. If additional detail on the immunogen is needed to determine the suitability of the antibody for your needs, please contact our Scientific Support team to discuss your requirements. Database link: NP_001137533.1  Run BLAST with  Run BLAST with
Positive control	HeLa, 293T, Jurkat, TCMK and NIH-3T3 whole cell lysates.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7 Preservative: 0.09% Sodium azide Constituent: 99% Tris citrate/phosphate pH 7 - 8

Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab205020 in the following tested applications. The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		1/2000 - 1/10000. Predicted molecular weight: 107 kDa.
IP		Use at 2-10 µg/mg of lysate.

Target

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.

Sequence similarities

Contains 6 HEAT repeats.

Post-translational modifications

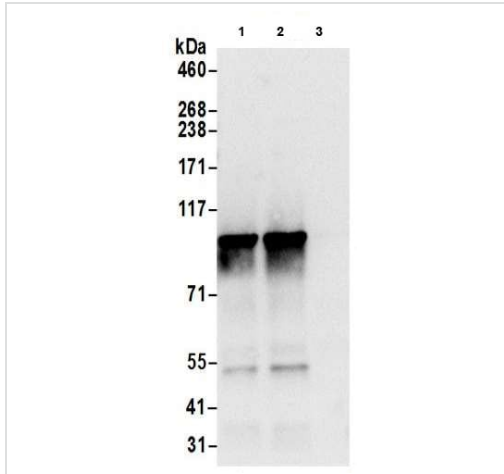
Proteolytically cleaved between Ser-528 and Ser-529 by CAPN8.

Cellular localization

Cytoplasm. Golgi apparatus membrane. Cytoplasmic vesicle > COPI-coated vesicle membrane. Cell membrane. Endoplasmic reticulum-Golgi intermediate compartment. The coatomer is cytoplasmic or polymerized on the cytoplasmic side of the Golgi, as well as on the vesicles/buds originating from it. 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-

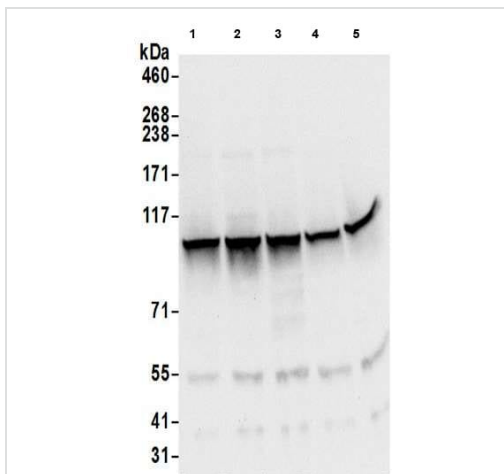
most Golgi cisternae (By similarity). Present in cytoplasm, not associated with visible coats or membranes, with a minor fraction present on small clusters of tubules and vesicles (By similarity). Some association with high-density and low-density microsomes and mitochondria/nuclei fraction (By similarity). Very little found in plasma membrane fraction.

Images



Immunoprecipitation - Anti-beta COP antibody (ab205020)

Detection of beta COP in Immunoprecipitates of 293T whole cell lysates (1 mg for IP, 20% of IP loaded) using ab205020 at 6 µg/mg lysate for IP (Lane 2). For WB detection an **ab205017** was used at 0.4 µg/mL. Lane 1 represents positive control and lane 3 is control IgG IP.



Western blot - Anti-beta COP antibody (ab205020)

All lanes : Anti-beta COP antibody (ab205020) at 0.1 µg/ml

Lane 1 : HeLa whole cell lysate

Lane 2 : 293T whole cell lysate

Lane 3 : Jurkat whole cell lysate

Lane 4 : TCMK whole cell lysate

Lane 5 : NIH-3T3 whole cell lysate

Lysates/proteins at 50 µg per lane.

Developed using the ECL technique.

Predicted band size: 107 kDa

Exposure time: 3 seconds

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