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COPE Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP11329b

Product Information

Application	WB, IHC-P, IF, E
Primary Accession	O14579
Other Accession	O89079, Q60445, Q5ZIK9, NP_009194.2
Reactivity	Human
Predicted	Chicken, Hamster, Mouse, Rat, Bovine, Canine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB19580
Calculated MW	34482
Antigen Region	273-300

Additional Information

Gene ID	11316
Other Names	Coatomer subunit epsilon, Epsilon-coat protein, Epsilon-COP, COPE
Target/Specificity	This COPE antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 273-300 amino acids from the C-terminal region of human COPE.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	COPE Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	COPE
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. The 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 with 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 (By similarity).
Cellular Location	Cytoplasm. Golgi apparatus membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic vesicle, COPI-coated vesicle membrane; Peripheral membrane protein; Cytoplasmic side. Note=The coatomer is cytoplasmic or polymerized on the cytoplasmic side of the Golgi, as well as on the vesicles/buds originating from it.

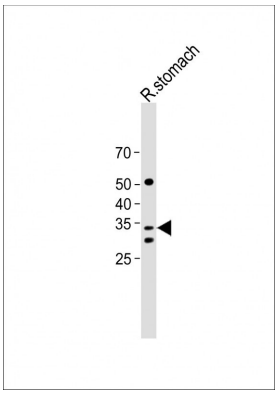
Background

The product of this gene is an epsilon subunit of coatomer protein complex. Coatomer is a cytosolic protein complex that binds to dilysine motifs and reversibly associates with Golgi non-clathrin-coated vesicles. It is required for budding from Golgi membranes, and is essential for the retrograde Golgi-to-ER transport of dilysine-tagged proteins. Coatomer complex consists of at least the alpha, beta, beta', gamma, delta, epsilon and zeta subunits. Alternatively spliced transcript variants encoding different isoforms have been identified.

References

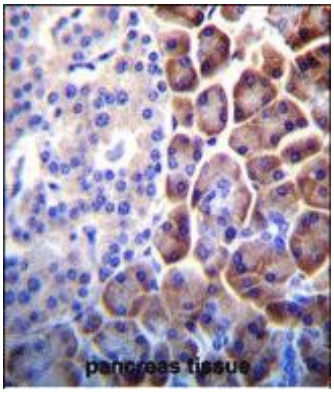
Davila, S., et al. Genes Immun. 11(3):232-238(2010)
Morikawa, R.K., et al. J. Biol. Chem. 284(39):26620-26630(2009)
Maruyama, S., et al. Mol. Cell. Biochem. 307 (1-2), 73-82 (2008) :
Goryachev, A.B., et al. PLoS Comput. Biol. 2 (12), E172 (2006) :
Lippincott-Schwartz, J., et al. Trends Cell Biol. 16 (10), E1-E4 (2006) :

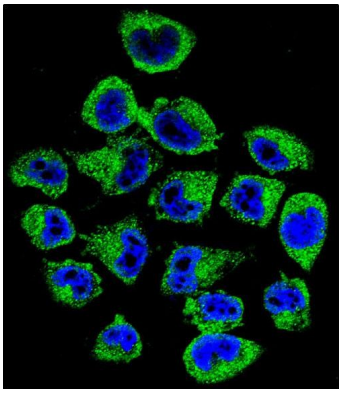
Images



All lanes: Anti-COPE Antibody (C-term) at 1:2000 dilution + Rat stomach lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 34 KDa Blocking/Dilution buffer: 5% NFDM/TBST.

COPE Antibody (C-term) (Cat. #AP11329b)immunohistochemistry analysis in formalin fixed and paraffin embedded human pancreas tissue followed by peroxidase conjugation of the secondary antibody and DAB staining.This data demonstrates the use of COPE Antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.





Confocal immunofluorescent analysis of COPE Antibody (C-term)(Cat#AP11329b) with A375 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). DAPI was used to stain the cell nuclear (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.