

# COPG Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP19908b

## **Product Information**

**Application** WB, E **Primary Accession** Q9Y678 Other Accession NP 057212.1 Reactivity Human Host Rabbit Clonality Polyclonal Isotype Rabbit IgG **Clone Names** RB41787 **Calculated MW** 97718 721-750 **Antigen Region** 

# **Additional Information**

**Gene ID** 22820

Other Names Coatomer subunit gamma-1, Gamma-1-coat protein, Gamma-1-COP, COPG1,

COPG

**Target/Specificity** This COPG antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 721-750 amino acids from the

C-terminal region of human COPG.

**Dilution** WB~~1:1000 E~~Use at an assay dependent concentration.

**Format** Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

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** COPG Antibody (C-term) is for research use only and not for use in diagnostic

or therapeutic procedures.

## **Protein Information**

Name COPG1

**Synonyms** COPG

**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. 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 triglyceride lipase (PNPLA2) with the lipid droplet surface to mediate lipolysis (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. Predominantly located in the cis- Golgi apparatus.

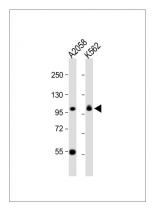
# **Background**

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 (By similarity).

## References

Pinheiro, A.P., et al. Am. J. Med. Genet. B Neuropsychiatr. Genet. 153B (5), 1070-1080 (2010): Ewing, R.M., et al. Mol. Syst. Biol. 3, 89 (2007): Lippincott-Schwartz, J., et al. Trends Cell Biol. 16 (10), E1-E4 (2006): Watson, P.J., et al. Traffic 5(2):79-88(2004) Rohde, H.M., et al. J. Biol. Chem. 278(52):52689-52699(2003)

# **Images**



All lanes: Anti-COPG Antibody (C-term) at 1:1000 dilution Lane 1: A2058 whole cell lysate Lane 2: K562 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size: 98 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

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