SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

# Rabbit Anti-COPG antibody

SL13978R

| | |
|---|---|
| **Product Name:** | COPG |
| **Chinese Name:** | 外壳蛋白COPG-γ抗体 |
| **Alias:** | Coat protein gamma cop; Coatomer protein complex, subunit gamma 1; coatomer protein complex, subunit gamma; Coatomer subunit gamma; Coatomer subunit gamma-1; COP; COPG1; COPG1_HUMAN; FLJ21068; Gamma coat protein; Gamma COP; Gamma-1-coat protein; Gamma-1-COP. |
| **Organism Species:** | Rabbit |
| **Clonality:** | Polyclonal |
| **React Species:** | Human,Mouse,Rat,Cow,Horse,Sheep, |
| **Applications:** | WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair）<br>not yet tested in other applications.<br>optimal dilutions/concentrations should be determined by the end user. |
| **Molecular weight:** | 98kDa |
| **Cellular localization:** | cytoplasmic |
| **Form:** | Lyophilized or Liquid |
| **Concentration:** | 1mg/ml |
| **immunogen:** | KLH conjugated synthetic peptide derived from human COPG:65-165/871 |
| **Lsotype:** | IgG |
| **Purification:** | affinity purified by Protein A |
| **Storage Buffer:** | 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol. |
| **Storage:** | Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C. |
| **PubMed:** | PubMed |
| **Product Detail:** | 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 |

www.sunlongbiotech.com

two subcomplexes. The first consists of the COPB, COPG, COPD and COPZ subunits (also known as b-, g-, d- and z-COP, respectively), which are distantly homologous to AP Clathrin adaptor subunits. The second consists of the COPA, b'-COP and COPE subunits (also known as a-COP, COPP and e-COP, r espectively). The COPG (g-COP) subunit of the coatomer is believed to mediate the binding to the cytoplasmic dilysine motifs of membrane proteins. COPG has the highest level of expression in mouse testis and is expressed in a parent-of-origin-specific manner in mammals.

**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.

**Subcellular Location:**
Cytoplasm. Golgi apparatus membrane. Cytoplasmic vesicle > COPI-coated vesicle membrane. The coatomer is cytoplasmic or polymerized on the cytoplasmic side of the Golgi, as well as on the vesicles/buds originating from it.

**Similarity:**
Belongs to the COPG family.
Contains 4 HEAT repeats.

**SWISS:**
Q9Y678

**Gene ID:**
22820

**Database links:**

Entrez Gene: 22820 Human

SwissProt: Q9Y678 Human

Unigene: 518250 Human

www.sunlongbiotech.com

| | |
|---|---|
| | **Important Note:**<br>This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications. |

www.sunlongbiotech.com