

For Research Use Only

# COPA Recombinant antibody

Catalog Number:83089-1-RR



## Basic Information

<b>Catalog Number:</b> 83089-1-RR	<b>GenBank Accession Number:</b> NM_004371	<b>Purification Method:</b> Protein A purification
<b>Size:</b> 100ul , Concentration: 1000 ug/ml by Nanodrop;	<b>GeneID (NCBI):</b> 1314	<b>CloneNo.:</b> 230361G2
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P53621	<b>Recommended Dilutions:</b> WB 1:2000-1:10000 IHC 1:250-1:1000 IF/ICC 1:125-1:500
<b>Isotype:</b> IgG	<b>Full Name:</b> coatomer protein complex, subunit alpha	
<b>Immunogen Catalog Number:</b> AG34207	<b>Calculated MW:</b> 138 kDa	
	<b>Observed MW:</b> 150 kDa	

## Applications

**Tested Applications:**  
WB, IHC, IF/ICC, FC (Intra), ELISA

**Species Specificity:**  
human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB :** HeLa cells, Jurkat cells, NIH/3T3 cells, MCF-7 cells, C2C12 cells

**IHC :** mouse liver tissue, human stomach tissue

**IF/ICC :** HeLa cells,

## Background Information

COPA, also named HEP-COP and Alpha-COP, is coatomer subunit alpha. 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.

## Storage

**Storage:**  
Store at -20°C. Stable for one year after shipment.  
**Storage Buffer:**  
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.  
**Aliquoting is unnecessary for -20°C storage**

**\*\*\* 20ul sizes contain 0.1% BSA**

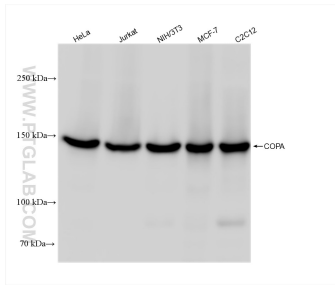
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

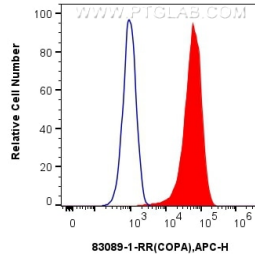
E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

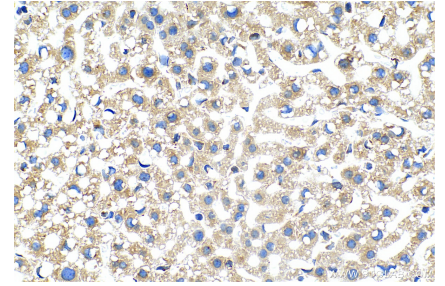
## Selected Validation Data



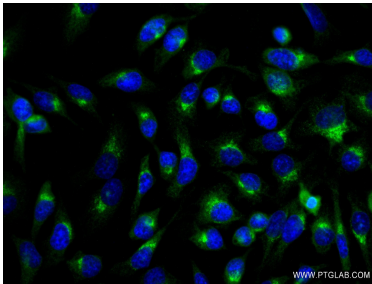
Various lysates were subjected to SDS PAGE followed by western blot with 83089-1-RR (COPA antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



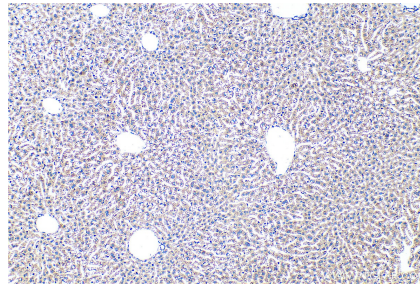
$1 \times 10^6$  HeLa cells were intracellularly stained with 0.25  $\mu$ g Anti-Human COPA (83089-1-RR, Clone:230361G2) and APC-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (red), or 0.25  $\mu$ g Rabbit IgG control Rabbit PolyAb (30000-0-AP) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



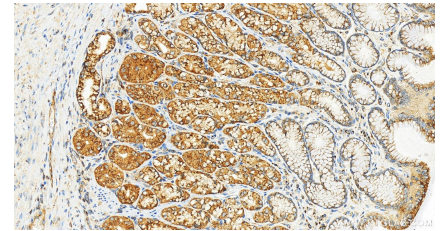
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 83089-1-RR (COPA antibody) at dilution of 1:500 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



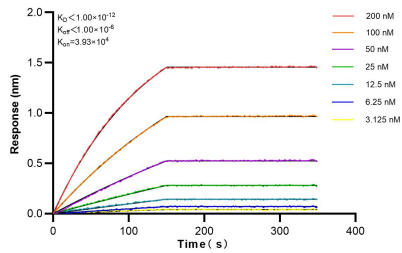
Immunofluorescent analysis of (-20°C Ethanol) fixed HeLa cells using COPA antibody (83089-1-RR, Clone: 230361G2) at dilution of 1:250 and CoraLite@488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2).



Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 83089-1-RR (COPA antibody) at dilution of 1:500 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human normal stomach slide using 83089-1-RR (COPA antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 83089-1-RR against Human COPA were performed. The affinity constant is below 1 pM.