

## Product datasheet for **RG214930**

### COPA (NM\_004371) Human Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	COPA (NM_004371) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	COPA
Synonyms:	AIJJK; alpha-COP; HEP-COP
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>RG214930 representing NM_004371 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGTTAACCAAATTCGAGACCAAGAGCGCGGGTCAAAGGGCTCAGCTTTCACCCAAAAGACCTTGGA  
TCCTGACTAGTTTACATAATGGGGTCATCCAGTTATGGGACTATCGGATGTGCACTCTCATTGACAAAGT  
TGATGAACATGATGGTCCAGTGCAGGCCATTGACTTCCATAAGCAGCAGCCACTGTTCTGCTCTGGAGGA  
GATGACTATAAGATTAAGGTTTGAATTACAAGCTTCGGCGCTGTCTTTTACATTGCTTGGGCACTTAG  
ATTATATTCGCACCACGTTTTTTCATCATGAATATCCCTGGATTCTGAGTGCCTCCGATGATCAGACCAT  
CCGAGTGTGGAAGTGGCAATCTAGAACCTGTGTTGTGTGTTAACAGGGCACAACCATATGTGATGTGT  
GCTCAGTTCACCCACAGAAGACTTGGTAGTATCAGCCAGCCTGGACCAGACTGTGCGCGTTTGGGATA  
TTTCTGGTCTGAGGAAAAAAACCTGTCCCTGGTGGCGTGAATCGGATGTGAGAGGAATAACTGGGGT  
TGATCTATTTGGAACACAGATGCAGTGGTGAAGCATGTACTAGAGGGTCACGATCGTGGAGTAACTGG  
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GTGAAATACGTTATCTGGTCAGCAGACATGTCACATGTAGCACTACTAGCCAAACACGCCATTGTGATCT  
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TGCTATTCCTGAGTTCAAAGGTCAAATCTGCAGGGTACCACAGTGACAGAGATTGGCAAAGATGTGA  
TTGGTTTAAGGATCAGTCTCTGCAGTTTCGC

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >RG214930 representing NM\_004371  
 Red=Cloning site Green=Tags(s)

MLTKFETKSARVKGLSFHPKRPWILTSLHNGVIQLWDYRMCTLIDKFDEHDGPVIRGIDFHKQQPLFVSGG  
 DDYKIKVWNYKLRRLFTLLGHLDYIRTTFFHHEYWPILSASDDQTIIRVWNWQSRTCVCLTGNHNYVMC  
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 AAFHPTMPLIVSGADDRQVKIWRMNESKAWEVDTCRGHYNNVSCAVFHPRQELILSNSEDKSIRVWDMSK  
 RTGVQTFRRDHDRFVWLAHPNLLFAAGHDGGMIVFKLERERPAYAVHGNMLHYVKDRFLRQLDFNSSK  
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 TKGTSPTQIWCNNSQLPVDHILAGSFETAMRLLHDQVGVIQFGPYKQLFLQTYARGRTTYQALPCLPSMY  
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 QQLITICREYIVGLSVETERKKLPKETLEQQKRICEMAAYFTHSNLQPVHMILVLRALNLFKLNKFKT  
 AATFARRLLELGPKEVAQQTRKILSACEKNPTDAYQLNYDMHNPFDICAASYRPIYRGKPVKCPCLSGA  
 CYSPEFKGQICRVTTVTIEIGKDVIGLRISPLQFR

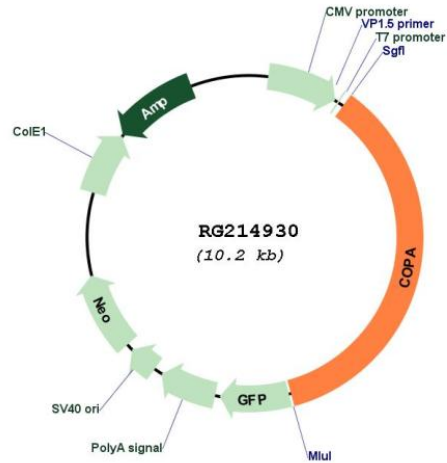
TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



**Plasmid Map:**


**ACCN:** NM\_004371

**ORF Size:** 3672 bp

**OTI Disclaimer:** The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

**OTI Annotation:** This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

**Components:** The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

**Reconstitution Method:**

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

**RefSeq:** [NM\\_004371.4](#)

**RefSeq Size:** 5639 bp

**RefSeq ORF:** 3675 bp

**Locus ID:** 1314

**UniProt ID:** [P53621](#)

**Cytogenetics:** 1q23.2

**Domains:** WD40, Coatomer\_WDAD

**Gene Summary:** In eukaryotic cells, protein transport between the endoplasmic reticulum and Golgi compartments is mediated in part by non-clathrin-coated vesicular coat proteins (COPs). Seven coat proteins have been identified, and they represent subunits of a complex known as coatomer. The subunits are designated alpha-COP, beta-COP, beta-prime-COP, gamma-COP, delta-COP, epsilon-COP, and zeta-COP. The alpha-COP, encoded by COPA, shares high sequence similarity with RET1P, the alpha subunit of the coatomer complex in yeast. Also, the N-terminal 25 amino acids of alpha-COP encode the bioactive peptide, xenin, which stimulates exocrine pancreatic secretion and may act as a gastrointestinal hormone. Alternative splicing results in multiple splice forms encoding distinct isoforms. [provided by RefSeq, Jul 2008]