

Product datasheet for **RG214199**

COPA (NM_001098398) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	COPA (NM_001098398) 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:	>RG214199 representing NM_001098398 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGTTAACCAAATTCGAGACCAAGAGCGCGGGTCAAAGGGCTCAGCTTTCACCCAAAAGACCTTGGA
TCCTGACTAGTTTACATAATGGGGTCATCCAGTTATGGGACTATCGGATGTGCACCTCATTGACAAAGT
TGATGAACATGATGGTCCAGTGCAGGCCATTGACTTCCATAAGCAGCAGCCACTGTTCTGCTCTGGAGGA
GATGACTATAAGATTAAGGTTTGAATTACAAGCTTCGGCGCTGTCTTTTACATTGCTTGGCAGCTTAG
ATTATATTCGCACCACGTTTTTTCATCATGAATATCCCTGGATTCTGAGTGCCTCCGATGATCAGACCAT
CCGAGTGTGGAAGTGGCAATCTAGAACCTGTGTTGTGTGTTAACAGGGCACAACCATATGTGATGTGT
GCTCAGTTCACCCACAGAAGACTTGGTAGTATCAGCCAGCCTGGACCAGACTGTGCGCGTTTGGGATA
TTTCTGGTCTGAGGAAAAAAACCTGTCCCTGGTGCAGTGGAAATCGGATGTGAGAGGAATAACTGGGGT
TGATCTATTTGGAACACAGATGCAGTGGTGAAGCATGTACTAGAGGGTCACGATCGTGGAGTAACTGG
GCTGCCTTCCACCCACTATGCCCTTATTGTATCTGGGGCAGATGATCGTCAAGTGAAGATCTGGCGCA
TGAATGAATCAAAGGCATGGGAGGTTGATACCTGCCGGGGCCATTACAACAATGTATCTTGTGCCGTCTT
CCACCCTCGCCAAGAGTTGATCCTCAGCAATTCTGAGGACAAGAGTATTCGAGTCTGGGATATGTCTAAG
CGGACTGGGTTTCAGACTTCCGACAGAGACCATGATCGTTTCTGGGCTAGCTGCTCACCTAACCTTA
ACCTCTTTCAGCAGGCCATGATGGTGGTATGATTGTGTTTAAAGCTGGAACGGGAACGGCCAGCCTATGC
TGTTTCATGGCAATATGCTACACTATGTCAAGGACCGATTCTTACGACAGCTGGATTTCAACAGCTCCAAA
GATGTAGCTGTGATGCAGTTGCGGAGTGGTTCCAAGTTTCCAGTATTCAATATGTCATACAATCCAGCAG
AAAATGCAGTCTGCTTTGTACAAGAGCTAGCAATCTAGAGAATAGTACCTATGACCTGTACACCATCCC
TAAAGATGCTGACTCCAGAATCCTGATGCGCCTGAAGGGAAACGATCCTCAGGCCTGACAGCCGTTTGG
GTCGCTCGAAATCGGTTTGTCTGCTAGATCGGATGCATTGCTTCTGATCAAGAATCTGAAGAATGAGA
TCACCAAAAAGGTACAGGTGCCCAACTGTGATGAGATCTTCTATGCTGGCACAGGCAATCTCCTGCTTCG
AGATGCGGACTCTATCACACTTTTGACGTACAGCAGAAGCGGACTCTGGCATCTGTGAAGATTTCTAAA



[View online »](#)

GTGAAATACGTTATCTGGTCAGCAGACATGTCACATGTAGCACTACTAGCCAAACACGAACACTCATGCC
CTTTGCCTCTTACAGCCATTGTGATCTGTAACCGCAAACCTGGATGCTTTATGTAACATTCATGAGAACAT
TCGTGTCAAGAGTGGGGCCTGGGATGAGAGTGGGGTATTTATCTATACCACAAGCAACCACATCAAATAT
GCTGTCACCACTGGGGACCACGGGATCATTGAACTCTGGATTTACCCATCTATGTCACACGGGTGAAGG
GCAACAATGTATACTGCCTAGACAGGGAGTGTGTCGCCGGGACTCACCATTGATCCCCTGAGTTCAA
ATTCAGCTGGCCCTGATCAACAGAAAAATGATGAGGTACTGCACATGGTGAGGAATGCCAAACTAGTT
GGCCAGTCTATTATTGCTTATCTCCAGAAGAAGGGCTATCCTGAAGTGGCACTGCATTTTGTCAAGGATG
AGAAAACTCGCTTAGTCTGGCACTGGAGTGTGGAACATTGAGATTGCTCTGGAAGCAGCCAAAGCACT
GGATGACAAGAAGCTGCTGGGAAAAGCTGGGAGAAGTGGCCCTGCTGCAGGGGAACCACCAGATTGTGGAA
ATGTGCTATCAGCGTACCAAAAACCTTTGACAAAACCTTTCCTTCTGTATCTTACTGGCAACTTAGAAA
AACTTCGCAAGATGATGAAGATTGCTGAGATCAGAAAGGACATGAGTGGCCACTATCAGAATGCCCTATA
CCTGGGTGATGTGTCAGAGCGTGTGCGGATCCTGAAGAACTGTGGACAGAAGTCCCTGGCCTATCTCACA
GCTGCTACCCATGGCTTAGATGAAGAAGCTGAGAGCCTAAAGGAGACATTTGACCCAGAGAAGGAGACAA
TCCCAGACATTGACCCTAATGCCAAGCTGCTCCAGCCACCTGCACCTATCATGCCATTGGATACCAATTG
GCCTTTATTGACTGTATCCAAAGGATTTTTTGAAGGCACCATTGCCAGCAAAGGGGAGGGAGGACTG
GCTGCTGACATTGACATTGACACTGTTGGTACAGAGGGCTGGGGAGAGGATGCAGAGCTGCAGTTGGATG
AAGATGGGTTTGTGGAGGCTACAGAAGGTTTGGGGATGATGCTCTTGGCAAGGGACAGGAAGAAGGAGG
TGGCTGGGATGTAGAAGAAGATCTGGAGCTCCCTCCTGAGCTGGATATATCCCCTGGGGCAGCTGGTGGG
GCTGAAGATGGTTTCTTTGTGCCCCCAACCAAGGGAACAAGTCCAACCTCAGATCTGGTGAATAACTCTC
AGCTTCCAGTTGATCACATCCTGGCAGGCTCTTTCGAAACAGCCATGCGGCTCCTTCATGACCAAGTAGG
GGTAATCCAGTTTGGCCCTACAAGCAACTGTTCTACAGACATACGCCCGAGGCCGCACAACCTATCAG
GCTCTGCCCTGCCTACCCTCCATGTATGGCTATCCTAATCGCAACTGGAAGGATGCAGGGCTGAAGAATG
GTGTACCAGCTGTGGCCTGAAGCTTAATGACCTCATCCAACGGTTGCAGCTGTGCTACCAGCTCACCAC
AGTTGGCAAATTTGAGGAGGCTGTGAAAAAATTCGGTTCCATCCTTCTCAGTGTGCCACTTCTTGTGTG
GACAATAAACAAGAGATTGCAGAGGCCAGCAGCTCATACCATTTGCCGTGAGTACATTGTGGTTTGT
CCGTGGAGACAGAAAGGAAGAGCTGCCAAAGAGACTTAGAACAGCAGAAGCGCATCTGTGAGATGGC
AGCCTATTTACCCACTCAAACCTGCAGCCTGTGCACATGATCCTGGTGTGCGTACAGCCCTCAATCTG
TTCTTCAAGCTCAAGAATTCAAGACAGCTGCCACCTTTGCTCGGCGCCTACTAGAACTCGGGCCCAAGC
CTGAGGTGGCCCAACAGACCCGAAAAATCCTGTCTGCCTGTGAGAAGAATCCCACAGATGCCTACCAGCT
CAATTATGACATGCACAACCCCTTTGACATTTGTGCTGCATCATATCGGCCATCTACCGTGAAAGCCA
GTAGAAAAGTGTCCACTCAGTGGGGCTGCTATCCCCTGAGTTCAAAGGTCAAATCTGCAGGGTCACCA
CAGTGACAGAGATTGGCAAAGATGTGATTGGTTTAAGGATCAGTCCTCTGCAGTTTCGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG214199 representing NM_001098398
 Red=Cloning site Green=Tags(s)

MLTKFETKSARVKGLSFHPKRPWILTSLHNGVIQLWDYRMCTLIDKFDEHDGPVIRGIDFHKQQLFVSGG
 DDYKIKVWNYKLRRCLFTLLGHLDYIRTTFFHHEYWPILSASDDQTIRVWNWQSRTCVCLTGNHNYVMC
 AQFHPTEDLVVSASLDQTVRVWDISGLRKKNLSPGAVESDVRGITGVDLFGTTDAVVKHVLEGHDRGVNW
 AAFHPTMPLIVSGADDRQVKIWRMNESKAWEVDTCRGHYNNVSCAVFHPRQELILSNSEDKSIRVWDMSK
 RTGVQTFRRDHDRFWVLAHPNLNLFAAGHDGGMIVFKLERERPAYAVHGNMLHYVKDRFLRQLDFNSSK
 DVAVMQLRSGSKFPVFNMSYNPAENAVLLCTRASNLENSTYDLYTIPKDADSQNPDAPEGKRSSGLTAVW
 VARNRFAVLDRMHSLLIKLNKNEITKKVQVPCDEIFYAGTGNLLLRDADSITLFDVQQRKTLASVKISK
 VKYVIWSADMSHVALLAKHEHSCPLPLTAIVICNRKLDALCNIHENIRVKSAGWDESGVFIYTTSNHIKY
 AVTTGDHGIIRTLDLPIYVTRVKGNVYCLDRECRPRVLTIDPTEFKFKLALINRKYDEVLMHVRNAKLV
 GQSI IAYLQKKGYPEVALHFVKDEKTRFSLALECGNIEIALEAAKALDDKNCWEKLEGEVALLQGNHQIVE
 MCYQRTKNFDKLSFLYLITGNLEKLRKMMKIAEIRKDMSGHYQNALYLGDSERVRILKNCGQKSLAYLT
 AATHGLDEEAESLKETFDPKEKETIPDIDPNAKLLQPPAPIMPLDTNWPLLTVSKGFFEGTIASKGKGGAL
 AADIDIDTVGTEGWGEDAELQLDEDGFVEATEGLGDDALGKGQEEGGWDVEEDLELPPELDI SPGAAGG
 AEDGFFVPPTKGTSPQTQIWCNNSQLPVDHILAGSFETAMRLLDHQQVGIQFQPYKQLFLQTYARGRTTYQ
 ALPCLPSMYGYPNRNWKDAGLKNVPAVGLKLNLDLIQRLQLCYQLTTVGKFEEAVEKFRSILLVPLLVV
 DNKQEIIEAQQLLITICREYIVGLSVETERKKLPKETLEQQKRICEMAAFYTHSNLQPVHMILVLRALNL
 FFKLNKFKTAAATFARRLLELGPKEVAQQTRKILSACEKNPTDAYQLNYDMHNPFDICAAASYRPIYRGKP
 VEKCLSGACYSPEFKGQICRVTTVTEIGKDVIGLRISPLQFR

TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_001098398

ORF Size: 3699 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001098398.2](#)

RefSeq Size: 5666 bp

RefSeq ORF: 3702 bp

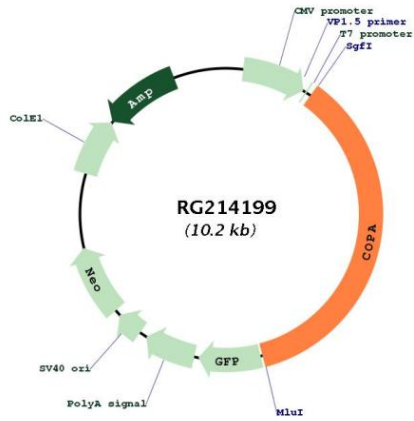
Locus ID: 1314

UniProt ID: [P53621](#)

Cytogenetics: 1q23.2

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]

Product images:



Circular map for RG214199