

## Product datasheet for **RG211749**

### **COG3 (NM\_031431) Human Tagged ORF Clone**

#### **Product data:**

|                                  |                         |
|----------------------------------|-------------------------|
| <b>Product Type:</b>             | Expression Plasmids     |
| <b>Tag:</b>                      | TurboGFP                |
| <b>Symbol:</b>                   | COG3                    |
| <b>Synonyms:</b>                 | SEC34                   |
| <b>Mammalian Cell Selection:</b> | Neomycin                |
| <b>Vector:</b>                   | pCMV6-AC-GFP (PS100010) |
| <b>E. coli Selection:</b>        | Ampicillin (100 ug/mL)  |



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**ORF Nucleotide Sequence:** >RG211749 representing NM\_031431  
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCCGCGATCGCC

ATGGCGGAGGCGGCGCTGTTGCTGCTGCTGAGGCGGCGGCGGAGCGGGACGCTAGGGAAAAGCTGGCTC  
TCTGGGATCGGAGACCGGACACGACGCGCGCGCTGACCGACAGGCAGACGACTCGGTATTGGAGCTGAA  
GGCGGCGGCAGAGAACTTGCCGGTGCCAGCTGAGCTTCCAATTGAAGACTTGTGCAGTTTAACATCCAG  
TCACTGCCCATTTGAAGTACTTCACTAGTGCCTGAATCTACAGAAGACATTCTCTTGAAGGGCTTCACTT  
CCTTAGGAATGGAAGAAGAAAGAAATTGAAACCGCACAGCAGTTTTTCTCATGGTTTGCAAAGCTGCAAAAC  
TCAGATGGATCAAGATGAAGGAATAAATATAGACAGATGAGGGATTACTTGTCTGGGTTTCAGGAGCAG  
TGTGATGCTATATTGAATGATGTAACAGTGCTCTTCAGCATCTGGAGTCTTTCAGAAACAGTATCTTT  
TTGTGTCCAATAAGACAGGAACCTACATGAAGCCTGTGAACAGCTCCTAAAAGAACAGTCGGAACCTGT  
TGATCTGGCTGAAAACATTCAACAAAAGCTTTCCTATTTTAAACGAATTGAAAACATTAACACAAAATTG  
AATTCCTTACATTGTCTGGTGAATAGTGACGGATTTATACCTATGCTGGCCAAGTTAGATGATTGTATAA  
CATATATCTCATCTCATCTAATTTTAAAGATTATCCCATATATTGCTGAAGTTTAAACAGTGTCTTTC  
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AGGGATCCTTCATCTGTACCTAATGCAGACAATGCCTTCACATTATTTTATGTGAAATTTTCGAGCTGCTG  
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AAGTTAGTCATGATGGAGCAATTGCACAGAGTTTGAAAGATGAACAGAGAAGGTACCTTCAGAAGCTT  
CATTTTCAGATGTTCACTTAGAAGAAGGAGAGTCTAACAGTCTGACAAAATCTGGTTCAACAGAATCCCT  
CAATCTAGACCACAGACCACAATTTCTCCAGCAGATCTTCATGGAATGTGGTATCCTACGGTTCGAAGA  
ACTCTTGTCTGTCTCTCCAAATATACAGATGCATAGATAGGGCAGTGTCCAAGGATTATCACAGGAAG  
CATTGTCTGCCTGCATTCACTCCTTACTTGGAGCGTCAGAGTCTATCAGCAAAAACAGACTCAGATTGA  
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ACCATTAAGGAAATTTCCCTGGACCTCAAGAAAAGTGAAGATGCAGCATTTAAATCCTGAACCTATGA  
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GATAAGAGAACATTATCTTGAAGTCTAAAAAAGACGTAGACCGTCATCTGAAATCGGCCTGTGAGCAGTTT  
ATTCAGCAGCAGACCAAGCTGTTTGTAGAACAGCTGGAGGAGTTCATGACAAAGGTTTCAGCGTTAAAAA  
CAATGGCCAGTCAGGGAGGCCCAAGTATACTCTCTCAGCAGCCTTGGGCACAACAGCAAGGTGAG  
TGACCTTGCGGCAACTGCATATAAGACAATAAAACAAAGCTGCCTGTGACATTGAGAAGTATGCTCTTG  
TACCTATCCAATAAAGATACCGAGTTTCATCTTGTAAACCTGTGAGGAATAATATTAGCAAGTCTTCC  
AGAAGTTCACGCTCTGTTAAAGGAAGAGTTTACGCCCTGAAGACATCCAGATCATTGCTGTCCATCTAT  
GGAACAGCTGAGCCTTCTGCTGTCAGTTTCTAA

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

>RG211749 representing NM\_031431

Red=Cloning site Green=Tags(s)

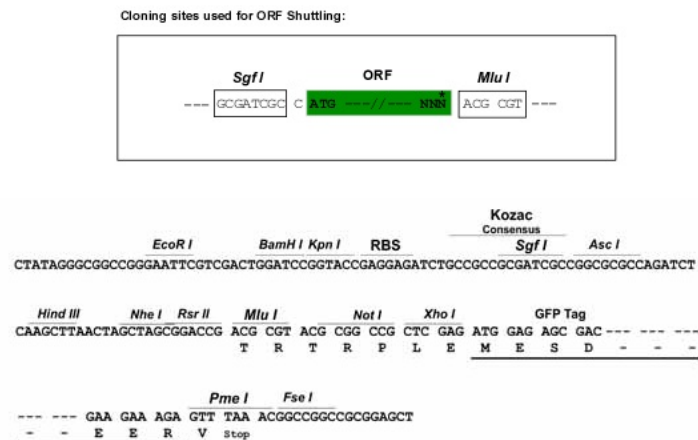
MAEAALLLLPEAAERDAREKLALWDRPDTPAPLTDRTQDSVLELKAAAENLPVPAELPIEDLCSLTQ  
SLPIELTSVPESTEDILLKGFTSLGMEERIETAQQFFSWFAKLQTMQDEGKYRQMRDYLSGFQE  
CDAILNDVNSALQHLESLQKQYLVSNTGTLHEACEQLLKEQSELVDLAENIQKLSYFNELETINTKL  
NSPTLSVNSDGFIPMLAKLDDCITYISSHPNFKDYPIYLLKFKQCLSKALHMKTYTVNTLQTLTSQLLK  
RDPSSVPNADNAFTLFYVKFRAAAPKVRTLIEQIELRSEKIPEYQQLNDIHQCYLDQRELLGPSIAC  
VAELTSQNRRDHCAVRSFGAFMVHVCQDEHQLYNEFFTKPTSKLDELLEKLCVSLYDVFRPLIIHVIHL  
ETLSELGILKNEVLEDHVQNAEQLGAFAGVKQMLEDVQERLVYRTHIYIQDTITGYKPAPGDLAYPD  
KLVMEQIAQSLKDEQKVPSEASFSDVHLEEGESNSLTKSGSTESLNRPQTITISPADLHGMWYPTVRR  
TLVCLSKLYRCIDRAVFQGLSQEALSAIQSLLGASESISKNTQIDGQLFLIKHLLILREQIAPFHTEF  
TIKEISLDLKKTRDAAFKILNPMTPRFFRLNSNNALIEFLLEGTPEREHYLDSKKDVRHLKSACEQF  
IQQQTSLFVEQLEEFMTKVSALKTMASQGGPKYTLSSQPAWPAKVSDLAATAYKTIKTLKPLVTLRSM  
YLSNKDTEFILFKPVRNNIQQVFQKFHALLKEEFPEDIIACPSMEQLSLLSVSK

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN:

NM\_031431

ORF Size:

2484 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.

|                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Components:</b>            | 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).                                                                                                                                                                                                                                                                                                                                    |
| <b>Reconstitution Method:</b> | <ol style="list-style-type: none"> <li>1. Centrifuge at 5,000xg for 5min.</li> <li>2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.</li> <li>3. Close the tube and incubate for 10 minutes at room temperature.</li> <li>4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.</li> <li>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.</li> </ol> |
| <b>Note:</b>                  | Plasmids are not sterile. For experiments where strict sterility is required, filtration with 0.22um filter is required.                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>RefSeq:</b>                | <a href="#">NM_031431.2</a> , <a href="#">NP_113619.1</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>RefSeq Size:</b>           | 4500 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>RefSeq ORF:</b>            | 2487 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Locus ID:</b>              | 83548                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>UniProt ID:</b>            | <a href="#">Q96JB2</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Cytogenetics:</b>          | 13q14.13                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Domains:</b>               | Sec34                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Gene Summary:</b>          | This gene encodes a component of the conserved oligomeric Golgi (COG) complex which is composed of eight different subunits and is required for normal Golgi morphology and localization. Defects in the COG complex result in multiple deficiencies in protein glycosylation. The protein encoded by this gene is involved in ER-Golgi transport.[provided by RefSeq, Jun 2011]                                                                                                                                        |