

## Product datasheet for **SC320442**

### COG2 (NM\_007357) Human Untagged Clone

#### Product data:

|                           |                                       |
|---------------------------|---------------------------------------|
| Product Type:             | Expression Plasmids                   |
| Product Name:             | COG2 (NM_007357) Human Untagged Clone |
| Tag:                      | Tag Free                              |
| Symbol:                   | COG2                                  |
| Synonyms:                 | CDG2Q; LDLC                           |
| Mammalian Cell Selection: | Neomycin                              |
| Vector:                   | pCMV6-AC (PS100020)                   |
| E. coli Selection:        | Ampicillin (100 ug/mL)                |



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**Fully Sequenced ORF:** >OriGene sequence for NM\_007357.1  
AGCGGACCCCTGTGCCGTGAAACTGGCGGTGGCCGCGGCCGAGTCGGTCTGCGCA  
GCCTCCTGCGTTTTCTCGCTTGGATCTTGGCACTGAGAGGCGGTGGCCGGCGGATGGAG  
AAAAGTAGGATGAACCTGCCAAGGGGCCGACACGCTCTGCTTCGACAAGGACGAGTTC  
ATGAAGGAAGATTTTCGATGTCGATCATTTTGTGTCTGACTGTAGGAAGCGGTCCAGCTG  
GAAGAACTGAGAGATGACCTGGAGCTCTACTATAAACTTCTTAAACAGCCATGGTCGAA  
CTCATCAACAAGGATTATGCAGATTTTGTCAATCTTCAACAACTTGGTTGGCATGGAC  
AAAGCCCTCAACCAGCTTTCTGTGCCTTTGGGACAATTACGAGAAGAGGTTCTGAGCCTT  
AGATCGTCTGTCAGTGAAGGAATTCGGGCAATTGATGAACGAATGTCTAAACAAGAGGAC  
ATTAGGAAAAAAGATGTGTATTGAGGCTTATACAAGTTATTCGGTCAGTTGAGAAA  
ATTGAAAAATCTTAACTCTCAAAGTTCTAAAGAACTCTGCACTAGAAGCAAGCAGC  
CCCCTTTTGAAGCAAAATTTTGGAGAGAATTGCCACAGAAATTAATCAGTTACAGTTT  
CATGCTGTTCAAAGCAAAGGCATGCCTCTTTTGGACAAAGTAAGACCGGTATAGCTGGC  
ATTACAGCCATGTTACAGCAGTCACTGGAAGGTCTCTATTAGAAGGCCTTCAGACGTCT  
GACGTCGATATAATACGGCACTGCTTGGGACTTACGCCACGATTGACAAGACACGGGAC  
GCGGAGGCCTTAGTTGGCCAAGTACTAGTGAAACCATACATAGACGAGGTGATTATAGAG  
CAGTTTGTGAATCTCATCCCAATGGCCTTCAGGTCATGTATAATAAACTCCTGGAGTTT  
GTTCTCACCATTGCCGCTTCTTCGAGAAGTCACAGGAGGTGCCATCTCCAGTGAAAAA  
GGCAATACTGTTCTGGATATGACTTTTTTGGTGAATCTGTTTGGCCACAAATAGTACAA  
GGATTAGAAGAAAAGTTACCTCGCTTTTTAATCTGGGAATCCCGATGCATTTTCATGAG  
AAATATACCATAAGTATGGATTTTGTGAGAAGATTGGAACGGCAGTGTGGATCACAGGCT  
AGTGTAAGAGATTAAGAGCCATCCTGCCTATCACAGCTTCAATAAGAAGTGGAAGTTG  
CCTGTTTATTTTCAAATAAGATTTAGAGAAATAGCGGGATCCTTAGAAGCAGCACTTACA  
GATGTCCTGGAAGATGCCCCAGCTGAAAGTCCGTATTGCCTTTTGGCTTCTCATAGAACT  
TGGAGCAGCCTTAGGAGGTGTTGGTCAGATGAGATGTTCTTGCCATTACTGGTGCATCGC  
CTGTGGAGACTCACTCTGCAGATTTTGGCAGTACTCTGTGTTGTCAATGAGCTTTCA  
CTCAGGCCCATTTCTAATGAAAGTCCCAAGGAGATCAAGAACTTTGGTAACTGGTAGC  
AAAGAACCTTCCATACCCAAGGAAACTGAAGACCAAGGAAGTGGTCTTCGGAAACA  
AAGCCTGTGGTTTCCATTTCCCGCACTCAGCTCGTGTATGTGGTTGCAGACCTGGACAAG  
CTTCAGGAGCAGCTTCCAGAACTCTTGGAAATAATCAAGCCAACTTGAATGATTGGC  
TTTAAGAATTTTCTTCTATCTCAGCAGCCTGGAGGACTCCAGAGCTCTTTTTCAGCC  
TGTGTGCCCTCCTTGAGTAGCAAGATCATCCAGGATTTAAGTGACTCTTGCTTCGGTTTC  
CTAAAAAGCGCCCTGGAGGTTCCAGGCTTACCGAAGAACCAATAAGGAGGTCCCAACC  
ACAGCTTCCTCCTATGTGGACAGTGCTCTGAAGCCCTTATTCCAGCTTCAGAGCGGACAC  
AAGGATAAGCTCAAACAAGCAATAATTCAGCAGTGGCTAGAAGGCACTCTCAGTGAAAGC  
ACTCATAAGTACTATGAAACCGTGTGAGATGTATTAACCTCTGTGAAGAAGATGGAAGAG  
AGCCTGAAAAGGCTGAAACAAGCCAGAAAAACCACTCCCGCAACCCCGTCGGTCCCACT  
GGTGGCATGAGCGACGACGACAAAAATCAGGCTGCAGTTGGCCCTAGATGTTGAGTACTTG  
GGAGAGCAGATACAAAAGTTGGGACTACAAGCAAGTGACATAAAAAGCTTCTCAGCTCTC  
GCAGAGCTTGTTGCTGCTGCCAAGGACCAGGCAACAGCAGAGCAGCCTTAAGCATCTTGG  
AAGATCCCGAGGTTAGATTCTTAAGCAAGAGAAGAGTTGGACTTCCAGGCTGAAGGGGAG  
AAAGTGACTCTGTTCTCTTAGCAACCGTCTGTAGCAAGAAGTGCTTCCAGCATCACTCC  
AGCAACACGCCCATGCGTCTTCTCAGCGTATTTGGGTCTTCTTGGCCAAAAGAACAC  
AAAAGCCTTTTCCATTGTATGGAAGATAGTTTTTAAGACATTTGAACTTTCTACTATA  
GTTTACAGAACAAATTATTTTATTTTATTGTAATCTTAGTGTGAAGAGCTGATTCTCT  
AAAATATGATTAAGTAAATATATACCTATGAATATCAAGAGTCGTCTCCCTGAGCCTGT  
AGTTGGAAGTGACGACTGTAATGGAATGATGTCTTGTATAGAAATGCCCTTCTCTGAAAT  
AAAGAGAACTCCTGGGCTTTCTAAAGAGGCTGCGGGAAGCCATCTCCACTCCCACTGTG  
TGTGAGAGCAGTGCTTCTGATCCTGCTGTACCCCGACCTCTGGCAGGAGCCGGCGCCAG  
TAGGAAAGACCTCCTTCTAAATAAAAGAAGTGCTCCCAAAAAAAAAAAAAAAAAAAAAA

**Restriction Sites:** Please inquire

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|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ACCN:</b>                  | NM_007357                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>OTI Disclaimer:</b>        | Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).                                                                                                                                                                                                                                                                    |
| <b>OTI Annotation:</b>        | This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.                                                                                                                                                                                                                                                                                                                                                |
| <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>RefSeq:</b>                | <u>NM_007357.1, NP_031383.1</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>RefSeq Size:</b>           | 2904 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>RefSeq ORF:</b>            | 2217 bp                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Locus ID:</b>              | 22796                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>UniProt ID:</b>            | <u>Q14746</u>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Cytogenetics:</b>          | 1q42.2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Protein Families:</b>      | Druggable Genome                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Gene Summary:</b>          | <p>This gene encodes a subunit of the conserved oligomeric Golgi complex that is required for maintaining normal structure and activity of the Golgi complex. The encoded protein specifically interacts with the USO1 vesicle docking protein and may be necessary for normal Golgi ribbon formation and trafficking of Golgi enzymes. Mutations of this gene are associated with abnormal glycosylation within the Golgi apparatus. Alternative splicing results in multiple transcript variants.[provided by RefSeq, Feb 2009]</p> <p>Transcript Variant: This variant (1) encodes the longer isoform (1).</p> |