

Product datasheet for **RG204855**

COG2 (NM_007357) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	COG2 (NM_007357) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	COG2
Synonyms:	CDG2Q; LDLC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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**ORF Nucleotide
Sequence:**

>RG204855 representing NM_007357
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGGATCGCC**

ATGGAGAAAAGTAGGATGAACCTGCCCAAGGGCCGGACACGCTCTGCTTCGACAAGGACGAGTTCATGA
 AGGAAGATTTTCGATGTCGATCATTTTGTGTCTGACTGTAGGAAGCGGGTCCAGCTGGAAGAACTGAGAGA
 TGACCTGGAGCTCTACTATAAACTTCTTAAACAGCCATGGTCGAACCTCATCAACAAGGATTATGCAGAT
 TTTGTCAATCTTTCAACAACTTGGTTGGCATGGACAAAGCCCTCAACCAGCTTTCTGTGCCCTTTGGGAC
 AATTACGAGAAGAGGTTCTGAGCCTTAGATCGTCTGTCAGTGAAGGAATTCGGGCAGTTGATGAACGAAT
 GTCTAAACAAGAGGACATTAGGAAAAAAGATGTGTGATTGAGGCTTATACAAGTTATTCGGTCAGTT
 GAGAAAATTGAAAAATCTTAACTCTCAAAGTTCTAAAGAAACCTCTGCACTAGAAGCAAGCAGCCCCC
 TTTTGACTGGACAAATTTTGGAGAGAATTGCCACAGAATTAATCAGTTACAGTTTCATGCTGTTCAAAG
 CAAAGGCATGCCCTTTTGGACAAAGTAAGACCGCGTATAGCTGGCATTACAGCCATGTTACAGCAGTCA
 CTGGAAGGTCTCCTATTAGAAGGCCTTCAGACGCTCTGACGTCGATATAATACGGCACTGCTTGCGGACTT
 ACGCCACGATTGACAAGACACGGGACGCGGAGGCTTAGTTGGCCAAGTACTAGTGAAACCATACATAGA
 CGAGGTGATTATAGAGCAGTTTGTGAATCTCATCCCAATGGCCTTCAGGTCATGTATAAATAACTCCTG
 GAGTTTGTTCCTCACCATTGCCGCTTCTTCGAGAAGTCACAGGAGGTGCCATCTCCAGTGAAAAAGGCA
 ATACTGTTCTCGGATATGACTTTTTTGGTGAATCTGTTTGGCCACAAATAGTACAAGGATTAGAAGAAAA
 GTTACCCTCGCTTTTAACTCCTGGGAATCCCGATGCATTTTCATGAGAAATATACCATAAGTATGGATTTT
 GTCAGAAGATTGGAACGGCAGTGTGGATCACAGGCTAGTGTAAAGAGATTAAGAGCCCATCCTGCCTATC
 ACAGCTTCAATAAGAAGTGGAACCTTGCCTGTTTATTTTCAAATAAGATTTAGAGAAATAGCGGGATCCTT
 AGAAGCAGCACTTACAGATGTCCTGGAAGATGCCCGAGCTGAAAGTCCGTATTGCCTTTTGGCTTCTCAT
 AGAACTTGGAGCAGCCTTAGGAGGTGTTGGTCAGATGAGATGTTCTTGCCATTACTGGTGCATCGCTGT
 GGAGACTCACTCTGCAGATTTTGGCACGATACTCTGTGTTGTCAATGAGCTTTCACTCAGGCCCATTTC
 TAATGAAAGTCCCAAGGAGATCAAGAAACCTTTGGTAACTGGTAGCAAAGAACCTTCCATCACCCAAGGA
 AACACTGAAGACCAAGGAAGTGGTCCTTCGAAACAAAGCCTGTGGTTTCCATTTCCCGCACTCAGCTCG
 TGTATGTGGTTGCAGACCTGGACAAGCTTCAGGAGCAGCTTCAGAACTCTTGAAATAATCAAGCCAAA
 ACTTGAAATGATTGGCTTTAAGAATTTTCTTCTATCTCAGCAGCCCTGGAGGACTCCAGAGCTCTTTT
 TCAGCCTGTGTGCCCTCCTTGAGTAGCAAGATCATCCAGGATTTAAGTGACTCTTGCTTCGGTTTCCTAA
 AAAGCGCCCTGGAGGTTCCAGGCTTTACCGAAGAACCAATAAGGAGGTCCCAACCACAGCTTCCTCCTA
 TGTGGACAGTGCTCTGAAGCCCTTATTCAGCTTCAGAGCGGACACAAGGATAAGCTCAAACAAGCAATA
 ATTCAGCAGTGGCTAGAAGGCACTCTCAGTGAAAGCACTCATAAGTACTATGAAACCGTGTGAGATGTAT
 TAAACTCTGTGAAGAAGATGGAAGAGAGCCTGAAAAGGCTGAAACAAGCCAGAAAAACCACTCCCGCCAA
 CCCCGTCGGTCCAGTGGTGGCATGAGCGACGACGACAAAATCAGGCTGCAGTTGGCCCTAGATGTTGAG
 TACTTGGGAGAGCAGATACAAAAGTTGGGACTACAAGCAAGTGACATAAAAAGCTTCTCAGCTCTCGCAG
 AGCTTGTTGCTGCTGCCAAGGACCAGGCAACAGCAGAGCAGCCT

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence: >RG204855 representing NM_007357
 Red=Cloning site Green=Tags(s)

MEKSRMNLPGKPDTLCFDKDEFMKEDFDVDHFVSDCRKRVQLEELRDDLELYYKLLKTAMVELINKDYAD
 FVNLSNVLGMDKALNQLSVPLGQLREEVLRLSSVSEGIRAVDERMSKQEDIRKKMKCVLRLIQVIRSV
 EKIEKILNSQSSKETSALAEASSPLL TGQILERIATEFNQLQHAVQSKGMPLLDKVRPRIAGITAMLQQS
 LEGLLEGLQTSVDVDIRHCLRTYATIDKTRDAEALVGQVLKPYIDEVIEQFVESHNPGLQVMYNKLL
 EFVPHHCRLREVTGGAISSEKGNTPGYDFLVNSVWPQIVQGLEEKLP SLFNPGNPDAFHEKYTISMDF
 VRRLERQCGSQASVKRLRAHPAYHSFNKKWNLPVYFQIRFREIAGSLEAALTDVLEDAPAESPYCLLASH
 RTWSSLRRCWSDMFLLVHRLWRLTLQILARYSVFVNELSLRPISNESPKEIKPLVTGSKEPSITQG
 NTEQSGSPSETPKPVVISRTQLVYVADLDKLQEQLELLEIKPKLEMIGFKNFSSISAALEDSQSSF
 SACVPSLSSKIIQDLSDCFGLKSALEVPRLYRRTNKEVPTTASSYVDSALKPLFQLQSGHKDKLKQAI
 IQQWLEGLTSESTHKYYETVSDVLNSVKKMEESLKRLKQARKTTPANPVGPSGGMSDDDKIRLQLALDVE
 YLGEQIQKLGQASDIKFSALAEVAAAKDQATAEQP

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_007357

ORF Size: 2214 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_007357.3](#)

RefSeq Size: 2904 bp

RefSeq ORF: 2217 bp

Locus ID: 22796

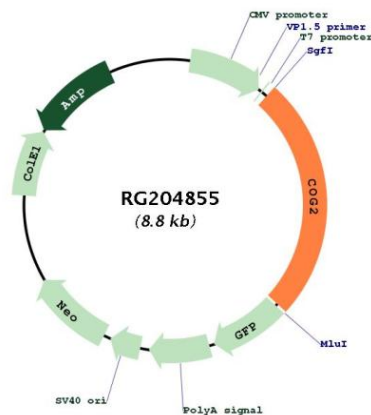
UniProt ID: [Q14746](#)

Cytogenetics: 1q42.2

Protein Families: Druggable Genome

Gene Summary: 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]

Product images:



Circular map for RG204855