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Product datasheet for RC204855

COG2 (NM_007357) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	COG2 (NM_007357) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	COG2
Synonyms:	CDG2Q; LDLC
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)

ORF Nucleotide Sequence:

>RC204855 ORF sequence
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGAGAAAAGTAGGATGAACCTGCCCAAGGGGCCGGACACGCTCTGCTTCGACAAGGACGAGTTCATGA
AGGAAGATTTCGATGTCGATCATTTTGTGTCTGACTGTAGGAAGCGGGTCCAGCTGGAAGAACTGAGAGA
TGACCTGGAGCTCTACTATAAACTTCTTAAAACAGCCATGGTCGAACTCATCAACAAGGATTATGCAGAT
TTTGTCAATCTTTCAACAAACTTGGTTGGCATGGACAAAGCCCTCAACCAGCTTTCTGTGCCTTTGGGAC
AATTACGAGAAGAGGTTCTGAGCCTTAGATCGTCTGTCAGTGAAGGAATTCGGGCAGTTGATGAACGAAT
GTCTAAACAAGAGGACATTAGGAAAAAAAAGATGTGTGTATTGAGGCTTATACAAGTTATTCGGTCAGTT
GAGAAAATTGAAAAAATCTTAAACTCTCAAAGTTCTAAAGAAACCTCTGCACTAGAAGCAAGCAGCCCCC
TTTTGACTGGACAAATTTTGGAGAGAATTGCCACAGAATTTAATCAGTTACAGTTTCATGCTGTTCAAAG
CAAAGGCATGCCTCTTTTGGACAAAGTAAGACCGCGTATAGCTGGCATTACAGCCATGTTACAGCAGTCA
CTGGAAGGTCTCCTATTAGAAGGCCTTCAGACGTCTGACGTCGATATAATACGGCACTGCTTGCGGACTT
ACGCCACGATTGACAAGACACGGGACGCGGAGGCCTTAGTTGGCCAAGTACTAGTGAAACCATACATAGA
CGAGGTGATTATAGAGCAGTTTGTTGAATCTCATCCCAATGGCCTTCAGGTCATGTATAATAAACTCCTG
GAGTTTGTTCCTCACCATTGCCGCCTTCTTCGAGAAGTCACAGGAGGTGCCATCTCCAGTGAAAAAGGCA
ATACTGTTCCTGGATATGACTTTTTGGTGAATTCTGTTTGGCCACAAATAGTACAAGGATTAGAAGAAAA
GTTACCCTCGCTTTTTAATCCTGGGAATCCCGATGCATTTCATGAGAAATATACCATAAGTATGGATTTT
GTCAGAAGATTGGAACGGCAGTGTGGATCACAGGCTAGTGTAAAGAGATTAAGAGCCCATCCTGCCTATC
ACAGCTTCAATAAGAAGTGGAACTTGCCTGTTTATTTTCAAATAAGATTTAGAGAAATAGCGGGATCCTT
AGAAGCAGCACTTACAGATGTCCTGGAAGATGCCCCAGCTGAAAGTCCGTATTGCCTTTTGGCTTCTCAT
AGAACTTGGAGCAGCCTTAGGAGGTGTTGGTCAGATGAGATGTTCTTGCCATTACTGGTGCATCGCCTGT
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TAATGAAAGTCCCAAGGAGATCAAGAAACCTTTGGTAACTGGTAGCAAAGAACCTTCCATCACCCAAGGA
AACACTGAAGACCAAGGAAGTGGTCCTTCGGAAACAAAGCCTGTGGTTTCCATTTCCCGCACTCAGCTCG
TGTATGTGGTTGCAGACCTGGACAAGCTTCAGGAGCAGCTTCCAGAACTCTTGGAAATAATCAAGCCAAA
ACTTGAAATGATTGGCTTTAAGAATTTTTCTTCTATCTCAGCAGCCCTGGAGGACTCCCAGAGCTCTTTT
TCAGCCTGTGTGCCCTCCTTGAGTAGCAAGATCATCCAGGATTTAAGTGACTCTTGCTTCGGTTTCCTAA
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ATTCAGCAGTGGCTAGAAGGCACTCTCAGTGAAAGCACTCATAAGTACTATGAAACCGTGTCAGATGTAT
TAAACTCTGTGAAGAAGATGGAAGAGAGCCTGAAAAGGCTGAAACAAGCCAGAAAAACCACTCCCGCCAA
CCCCGTCGGTCCCAGTGGTGGCATGAGCGACGACGACAAAATCAGGCTGCAGTTGGCCCTAGATGTTGAG
TACTTGGGAGAGCAGATACAAAAGTTGGGACTACAAGCAAGTGACATAAAAAGCTTCTCAGCTCTCGCAG
AGCTTGTTGCTGCTGCCAAGGACCAGGCAACAGCAGAGCAGCCT

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA

Protein Sequence:

>RC204855 protein sequence
Red=Cloning site Green=Tags(s)

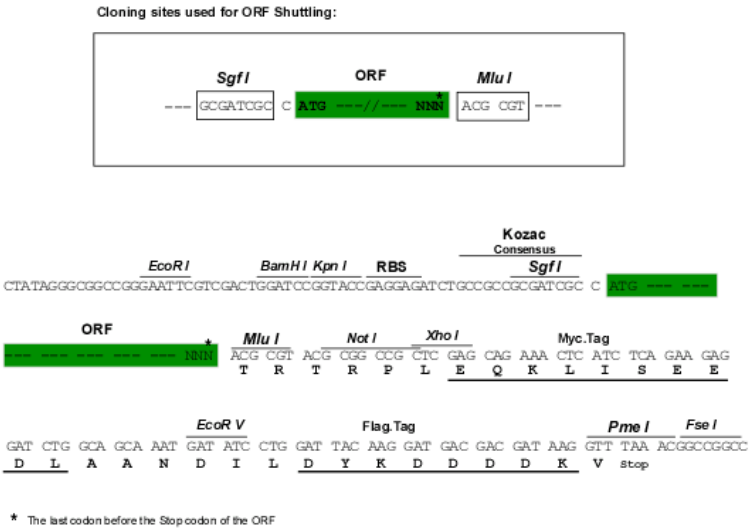
MEKSRMNLPKGPDTLCFDKDEFMKEDFDVDHFVSDCRKRVQLEELRDDLELYYKLLKTAMVELINKDYAD
FVNLSTNLVGMDKALNQLSVPLGQLREEVLSLRSSVSEGIRAVDERMSKQEDIRKKKMCVLRLIQVIRSV
EKIEKILNSQSSKETSALEASSPLLTGQILERIATEFNQLQFHAVQSKGMPLLDKVRPRIAGITAMLQQS
LEGLLLEGLQTSDVDIIRHCLRTYATIDKTRDAEALVGQVLVKPYIDEVIIEQFVESHPNGLQVMYNKLL
EFVPHHCRLLREVTGGAISSEKGNTVPGYDFLVNSVWPQIVQGLEEKLPSLFNPGNPDAFHEKYTISMDF
VRRLERQCGSQASVKRLRAHPAYHSFNKKWNLPVYFQIRFREIAGSLEAALTDVLEDAPAESPYCLLASH
RTWSSLRRCWSDEMFLPLLVHRLWRLTLQILARYSVFVNELSLRPISNESPKEIKKPLVTGSKEPSITQG
NTEDQGSGPSETKPVVSISRTQLVYVVADLDKLQEQLPELLEIIKPKLEMIGFKNFSSISAALEDSQSSF
SACVPSLSSKIIQDLSDSCFGFLKSALEVPRLYRRTNKEVPTTASSYVDSALKPLFQLQSGHKDKLKQAI
IQQWLEGTLSESTHKYYETVSDVLNSVKKMEESLKRLKQARKTTPANPVGPSGGMSDDDKIRLQLALDVE
YLGEQIQKLGLQASDIKSFSALAELVAAAKDQATAEQP

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6202_h04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_007357

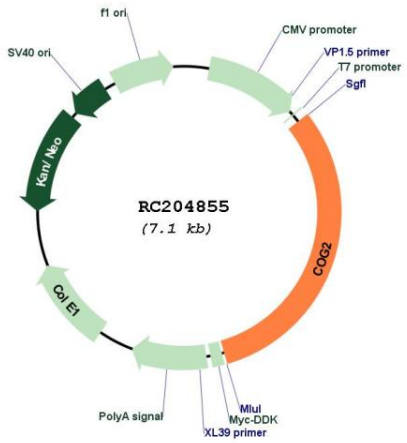
ORF Size: 2214 bp

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

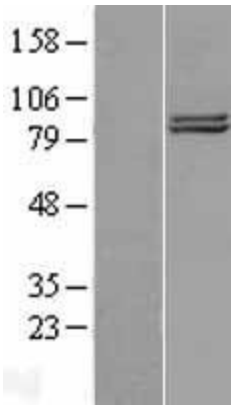
OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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:	2977 bp
RefSeq ORF:	2217 bp
Locus ID:	22796
UniProt ID:	Q14746
Cytogenetics:	1q42.2
Protein Families:	Druggable Genome
MW:	83.2 kDa
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]

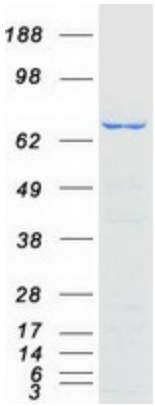
Product images:



Circular map for RC204855



Western blot validation of overexpression lysate (Cat# [LY402136]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from un-transfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC204855 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



Coomassie blue staining of purified COG2 protein (Cat# [TP304855]). The protein was produced from HEK293T cells transfected with COG2 cDNA clone (Cat# RC204855) using MegaTran 2.0 (Cat# [TT210002]).