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Product datasheet for MG211034

Copg1 (NM_017477) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Copg1 (NM_017477) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Copg1
Synonyms:	AU019265; BC056168; Copg; D6Ertd71e; D6Wsu16e
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>MG211034 representing NM_017477
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGTTGAAGAAATTCGACAAGAAGGACGAGGAGTCTGGTGGAGGCTCCAACCCCCTCCAGCACCTGGAGA
AGAGTGCCGTACTCCAAGAGGCTCGGGTCTTTAACGAAACTCCCATCAATCCCCGGAAATGTGCTCACAT
CCTCACCAAGATCCTTTATCTCATAAACCAGGGGGAGCACCTGGGGACCACGGAAGCAACTGAGGCTTTC
TTTGCCATGACCAAGCTCTTCCAGTCCAATGATCCCACACTCCGCCGCATGTGCTATTTGACCATCAAGG
AGATGTCCTGCATCGCTGAGGATGTCATCATTGTGACAAGCAGCCTGACAAAAGACATGACTGGGAAAGA
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GAACGCTACATGAAACAAGCAATTGTGGACAAGGTTCCCAGTGTCTCCAGCTCCGCCCTCGTGTCTTCCC
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GTGAGTAAGATGATCAGTAAGTTCACCCGGCACGGCCTCAAGTCCCCCTTTGCCTACTGCATGATGATCC
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GAAGCAGAAGGCTCTCAACGCAGGTTACATCCTAAATGGTCTGACCGTGTCCATCCCTGGTCTGGAGAAA
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AAGTCCTCTCCTGAGCCAGTGGCCCTCACAGAGTCCGAGACCGAGTATGTCATCCGTTGCACCAAACACA
CCTTCTCTGATCACTTGGTGTTCCAGTTTGACTGCACAAACACCCTCAATGACCAGACTCTGGAGAATGT
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TCAAGACACTCGAAGAGGCTGTGGGCAATATTGTGAAGTTCCTGGGAATGCCTCCTTGTGAGAGGTCAGA
CAAAGTGCCAGAAAACAAGAACACCCACACGCTGCTGCTAGCTGGAGTATTCCGGGGTGGTCATGACATC
CTTGTGCGTTCTCGGCTTCTGCTTTTGGACACAGTGACGATGCAGGTGACAGCCAGAAGCTCAGAGGAGC
TGCCAGTAGATATCATCTTGGCATCCGTGGGC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

Protein Sequence:

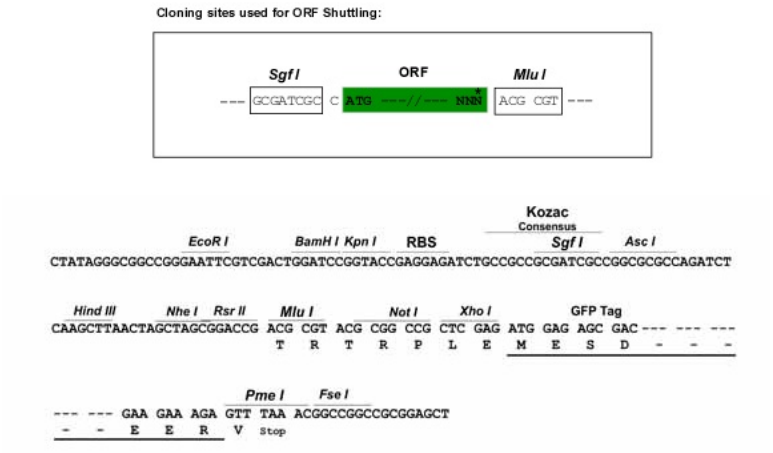
>MG211034 representing NM_017477
Red=Cloning site Green=Tags(s)

MLKKFDKKDEESGGGSNPLQHLEKSAVLQEARVFNETPINPRKCAHILTKILYLINQGEHLGTTEATEAF
FAMTKLFQSNDPTLRRMCYLTIKEMSCIAEDVIIVTSSLTKDMTGKEDNYRGPAVRALCQITDSTMLQAV
ERYMKQAIVDKVPSVSSSALVSSLHLLKCSFDVVKRWVNEAQEAASSDNIMVQYHALGLLYHVRKNDRLA
VSKMISKFTRHGLKSPFAYCMMIRVASKQLEEEDGSRDSPLFDFIESCLRNKHEMVVYEAASAIVNLPGC
SAKELAPAVSVLQLFCSSPKAALRYAAVRTLNKVAMKHPSAVTACNLDLENLVTDSNRSIATLAITTLLK
TGSESSIDRLMKQISSFMSEISDEFKVVVVQAISALCQKYPRKHAVLMNFLFTMLREEGGFEYKRAIVDC
IISIIEENSESKETGLSHLCEFIEDCEFTVLATRILHLLGQEGPKTNNPSKYIRFIYNRVVLEHEEVRAG
AVSALAKFGAQNEEMLPSILVLLKRCVMDDDNEVRDRATFYLNVLEQKQKALNAGYILNGLTVSIPGLEK
ALQQYTLEPSEKPFDLKSVPLATTPMAEQRPESTATAAVKQPEKVAATRQEIFQEQLAAVPEFQGLGPLF
KSSPEPVALTESETEYVIRCTKHTFSDHLVFQFDCTNTLNDQTLENVTVQMEPTEAYEVLSYVPARSLPY
NQPGTCYTLVALPTEDPTAVACTFSCVMKFTVKDCDPNTGEIDEEGYEDEYVLEDLEVTVADHIQKVMKV
NFEAAWDEVGDEFEKEETFTLSTIKTLEEAVGNIVKFLGMPPCERSDKVPENKNTHTLLLAGVFRGGHDI
LVRSRLLLLDTVTMQVTARSSEELPVDIILASVG

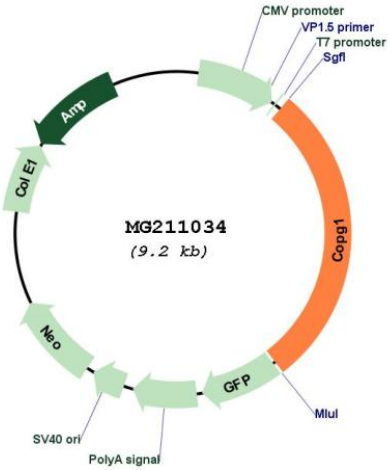
TRTRPLE - GFP Tag - V

Restriction Sites: SgfI-MluI

Cloning Scheme:



Plasmid Map:



ACCN:	NM_017477
ORF Size:	2622 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_017477.2, NP_059505.1
RefSeq Size:	4014 bp
RefSeq ORF:	2625 bp
Locus ID:	54161
UniProt ID:	Q9QZE5

Cytogenetics: 6 39.13 cM

Gene Summary: The coatomer is a cytosolic protein complex that binds to dilysine motifs and reversibly associates with Golgi non-clathrin-coated vesicles, which further mediate biosynthetic protein transport from the ER, via the Golgi up to the trans Golgi network. Coatomer complex is required for budding from Golgi membranes, and is essential for the retrograde Golgi-to-ER transport of dilysine-tagged proteins. In mammals, the coatomer can only be recruited by membranes associated to ADP-ribosylation factors (ARFs), which are small GTP-binding proteins; the complex also influences the Golgi structural integrity, as well as the processing, activity, and endocytic recycling of LDL receptors (By similarity). Required for limiting lipid storage in lipid droplets. Involved in lipid homeostasis by regulating the presence of perilipin family members PLIN2 and PLIN3 at the lipid droplet surface and promoting the association of adipocyte triglyceride lipase (PNPLA2) with the lipid droplet surface to mediate lipolysis. [UniProtKB/Swiss-Prot Function]