

Product datasheet for **MG211294**

Copb1 (NM_033370) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Copb1 (NM_033370) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Copb1
Synonyms:	2610019B04Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)



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ORF Nucleotide
Sequence:

>MG211294 representing NM_033370
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGACGGCAGCCGAGAACGTGTGCTATACGTTAATTAACGTGCCAATGGATTGAGAACCCCTTCGGAAA
 TCAGCTTAAAAAATGACCTGGAGAAAGGCGATGTGAAGTCAAAGACTGAACTTTGAAGAAAGTGATCAT
 TATGATTCTGAATGGGAAAAGCTTCCCGACTCCTGATGACAATCATTGCTTCGTGCTGCCTCTTCAG
 GATCACACCATCAAAAAGTTGCTCCTGGTCTTCTGGGAGATTGTTCTAAAACAACTCCAGATGGAAGGC
 TCTTACATGAAATGATTCTGTGTGTGATGCATACAGAAAGGATCTCCAGCACCCCAATGAGTTTATTCG
 TGGATCTACTCTTCGTTTCTTTGCAAATTGAAGGAAGCAGAATTGCTGGAACCTTTAATGCCTGCTATC
 CGTGCGTCTTGGAAACATCGTCACAGCTATGTTAGGAGAAATGCTGTTTTGGCCATCTACACCATCTACA
 GAAATTTTGAACATCTTACCTGATGCTCCTGAACTGATACATGATTTTCTTGTGAATGAGAAGGATGC
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 ACATGTATTGATCAAGTTCAGACATTTGGAGACATTCTACAGTTGGTTATTGTTGAACTAATTTATAAGG
 TCTGTCATGCTAATCCATCAGAAAGGGCCCGCTTCATTGCTGTATCTATAAATTAAGTGCAGTCACTAG
 TCCTGCTGTAATAATGAGGCTGCTGGGACACTGGTAACACTGTCAAGTGCACCAACTGCAATAAAGGCT
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 TGATGATGTAGATCGAATTTCCCTGTGCCTCAAGGTCTTATCTGAATGCTCACCTTTAATGAATGACATC
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 CTGTGGCTTTATGGCAGCAATCTTTATGCACGTTCTATTTGGAGAGGATGCGCTTGCAAAATGTCAGC
 ATTGAGAAGCCAGTTCACCAGGGACCAGATGCTGCCGTTACTGGCCATATAAGAATTCGTGCAAAAAGTC
 AGGAATGGCCTTGAGCCTTGAGATAAAAATCAACCTGTCTCAAAGAAGACTAGTCTA

ACGCGTACGCGGCCGCTCGAG – GFP Tag – GTTTAA

Protein Sequence: >MG211294 representing NM_033370
 Red=Cloning site Green=Tags(s)

MTAAENVCYTLINVPMDSEPPSEISLKNLDEKGDVKSKEALKKVIIMILNGEKLPGLLMTIIRFVLPLO
 DHTIKKLLLVFWEIVPKTTPDGRLLHEMILVCDAYRKDLQHPNEFIRGSTLRFLCKLKEAELLEPLMPAI
 RACLEHRHSYVRRNAVLAIYTIYRNFEHLIPDAPELIHDFLVNEKDASCKRNAFMMLIHADQDRALDYL
 TCIDQVQTFGDILQLVIVELIYKVCANPSEARARFIRCIYNLLQSSSPAVKYEAAGTLVTLSSAPTAIKA
 AAQCYIDLIIKESDNNVKLIVLDRVLVELKEHPAHERVLQDLVMDILRVLSTPDLEVRKKTLLALDLVSS
 RNVEELVIVLKKEVIKTNVSEHEDTDKYRQLLVRTLHSCSVRFPDMAANVIVLMEFLSDSNEAAAADV
 LEFVREAIQRFDNLRMLIVEKMLEVFHAIKSVKIYRGALWILGEYCSTKEDIQSVMEVRRSLGEIPIVE
 SEIKKEAGELKPEEEITVGPVQKLVTEMGTYATQSALSSSRPTKKEEDRPPLRGFLLDGGDFVAASLATT
 LTKIALRYVALVQEKKKQNSFVAEAMLLMATILHLGKSSLPKKPIITDDDVDRI SLCLKVLSECSPLMNDI
 FNKECRQSLSQMLSAKLEEEKLSQKKESEKRNVTVQDDPISFMQLTAKNEMNCKEDQFQLSLLAAMGNT
 QRKEAADPLASKLNKVTQLTGFSDPVYAEAYVHVNOYDIVLDVLVYNQTSDTLQNCTLELATLGDLLKVE
 KPSPPLTAPHDFANIKANVKVASTENGIIFGNIVYDVSGAASDRNCVVLSDIHIDIMDYIQPATCTDAEF
 RQMWAEFEWENKVTVNTNMTDLNDYLQHILKSTNMKCLTPEKALSGYCGFMAANLYARSIFGEDALANVS
 IEKPVHQGPDAAVTGHIRIRAKSQGMALSLGDKINLSQKKTSL

TRTRPLE - GFP Tag - V

Restriction Sites:

SgfI-MluI

Cloning Scheme:



ACCN: NM_033370

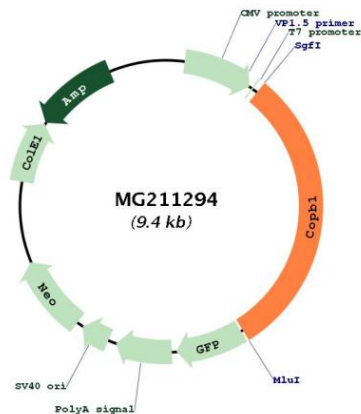
ORF Size: 2859 bp

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:	<ol style="list-style-type: none">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_033370.2
RefSeq Size:	3315 bp
RefSeq ORF:	2862 bp
Locus ID:	70349
UniProt ID:	Q9JIF7
Cytogenetics:	7 59.31 cM

Gene Summary:

The coatamer 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. Coatamer 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 coatamer 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. Involved in the Golgi disassembly and reassembly processes during cell cycle. Involved in autophagy by playing a role in early endosome function. Plays a role in organellar compartmentalization of secretory compartments including endoplasmic reticulum (ER)-Golgi intermediate compartment (ERGIC), Golgi, trans-Golgi network (TGN) and recycling endosomes, and in biosynthetic transport of CAV1 (By similarity). Plays a functional role in facilitating the transport of kappa-type opioid receptor mRNAs into axons and enhances translation of these proteins in cortical neurons. 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]

Product images:



Circular map for MG211294