

Product datasheet for **MG226619**

Comt (NM_001111062) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	Comt (NM_001111062) Mouse Tagged ORF Clone
Tag:	TurboGFP
Symbol:	Comt
Synonyms:	Comt1; D16Wsu103e; D330014B15Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)
ORF Nucleotide Sequence:	>MG226619 representing NM_001111062 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGCTGTTGGCTGCTGTCTCATTGGGTCTCCTGTTGCTGGCCTTCCTCCTGCTCCTGCGACACCTAGGCT
GGGGCTTGGTGGCTATTGGTTGGTTTGAGTTCGTGCAGCAGCCGGTCCACAACCTGCTCATGGGTGGCAC
AAAGGAGCAGCGCATCTGCGCCATGTGCAGCAACACGCAAAGCCTGGAGACCCAGAGCGTCTGGAG
GCCATTGATACCTACTGCTCAGAGAAGGAGTGGCCATGAACGTGGGTGACGCAAAGGCCAAATCATGG
ATGCAGTGATTCGGGAGTACAGGCCCTCGCTGGTCTGGAGCTAGGAGCTTATTGTGGCTACTCAGCCGT
GCGAATGGCCCGCTGCTGCCACCTGGAGCCAGGCTTCTACCATGGAGATTAACCCTGACTACGCTGCC
ATCACCCAGCAAATGCTGGACTTCGCAGGCCTACAGGACAAAGTTTCCATCCTCATCGGGGCATCCCAGG
ACCTTATCCCCAGCTGAAGAAGAAGTACGATGTGGACACATTAGACATGGTCTTTCTTGACCACTGGAA
AGACCGCTACCTTCCAGACACACTTCTCCTGGAGGAATGTGGCCTGCTGCGCAAGGGGACGGTGCTCCTA
GCTGACAATGTCATTGTCCCGGAACCCCTGACTTCTGGCGTATGTGAGGGGGAGCAGCAGCTTCGAGT
GCACACACTACAGCTCATACCTGGAGTACATGAAAGTGGTGGACGGCTTGAGAAGGCAGTCTACCAGGG
TCCAGGCAGCAGCCCCGTGAAGTCC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA



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Protein Sequence: >MG226619 representing NM_001111062
Red=Cloning site Green=Tags(s)

MLLAAVSLGLLLLAFLLLLRHLGWGLVAIGWFEFVQQPVHLLMGGTKEQRILRHVQQHAKPGDPQSVLE
 AIDTYCSEKEWAMNVGDAKGQIMDAVIREYRPSLVLELGAYCGYSAVRMARLLPPGARLLTMEINPDYAA
 ITQQLDFAGLQDKVSILIGASQDLIPQLKKKYDVDTLDMVFLDHWKDRYLPDTLLLEECGLLRKGTVLL
 ADNVIIVPGTPDFLAYVRGSSSFECTHYSSYLEYMKVVDGLEKAVYQGPSSPVKS

TRTRPLE - GFP Tag - V

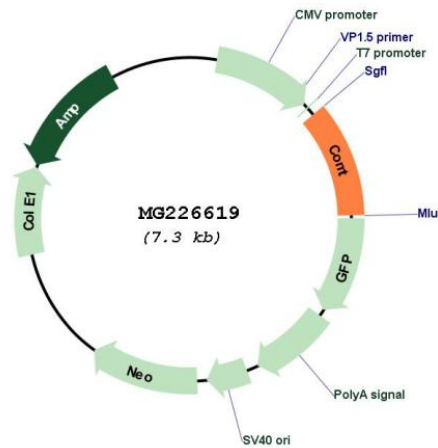
Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shutting:



Plasmid Map:



ACCN: NM_001111062

ORF Size: 795 bp

OTI Disclaimer: Due to the inherent nature of this plasmid, standard methods to replicate additional amounts of DNA in E. coli are highly likely to result in mutations and/or rearrangements. Therefore, OriGene does not guarantee the capability to replicate this plasmid DNA. Additional amounts of DNA can be purchased from OriGene with batch-specific, full-sequence verification at a reduced cost. Please contact our customer care team at custsupport@origene.com or by calling 301.340.3188 option 3 for pricing and delivery.

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_001111062.1](#), [NP_001104532.1](#)

RefSeq Size: 2185 bp

RefSeq ORF: 798 bp

Locus ID: 12846

UniProt ID: [O88587](#)

Cytogenetics: 16 11.4 cM

Gene Summary: Catalyzes the O-methylation, and thereby the inactivation, of catecholamine neurotransmitters and catechol hormones. Also shortens the biological half-lives of certain neuroactive drugs, like L-DOPA, alpha-methyl DOPA and isoproterenol.[UniProtKB/Swiss-Prot Function]