

## Product datasheet for MR203511

### Comt (NM\_007744) Mouse Tagged ORF Clone

#### Product data:

Product Type:	Expression Plasmids
Product Name:	Comt (NM_007744) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	Comt
Synonyms:	Comt1; D16Wsu103e; D330014B15Rik
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR203511 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC  
GCC**CGATCGCC**

ATGCTGTTGGCTGCTGTCTCATTGGGTCTCCTGTTGCTGGCCTTCCTCCTGCTCCTGCGACACCTAGGCT  
GGGGCTTGGTGGCTATTGGTTGGTTTGGTTTTCGTCGAGCAGCCGGTCCACAACCTGCTCATGGGTGGCAC  
AAAGGAGCAGCGCATCTGCGCCATGTGCAGCAACACGCAAAGCCTGGAGACCCCGAGCGTCTGGAG  
GCCATTGATACCTACTGCTCAGAGAAGGAGTGGCCATGAACGTGGGTGACGCAAAGGCCAAATCATGG  
ATGCAGTGATTCGGGAGTACAGGCCCTCGCTGGTCTGGAGCTAGGAGCTTATTGTGGCTACTCAGCCGT  
GCGAATGGCCCGCTGCTGCCACCTGGAGCCAGGCTTCTACCATGGAGATTAACCTGACTACGCTGCC  
ATCACCCAGCAAATGCTGGACTTCGCAGGCCTACAGGACAAAGTTTCCATCCTCATCGGGGCATCCAGG  
ACCTTATCCCCAGCTGAAGAAGAAGTACGATGTGGACACATTAGACATGGTCTTTCTTGACCACTGGAA  
AGACCGCTACCTTCCAGACACACTTCTCCTGGAGGAATGTGGCCTGCTGCGCAAGGGGACGGTGCTCCTA  
GCTGACAATGTCATTGTCCCGGGAACCCCTGACTTCTGGCGTATGTGAGGGGGAGCAGCAGCTTCGAGT  
GCACACACTACAGCTCATACCTGGAGTACATGAAAGTGGTGGACGGCTTGAGAAGGCAGTCTACCAGG  
TCCAGGCAGCAGCCCCGTAAGTCC

**ACGCGT**ACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT  
ACAAGGATGACGACGATAAGGTTTAA



**Protein Sequence:** >MR203511 protein sequence  
 Red=Cloning site Green=Tags(s)

MLLAAVSLGLLLLAFLLLLRHLGWGLVAIGWFEFVQQPVHLLMGGTKEQRILRHVQQHAKPGDPQSVLE  
 AIDTYCSEKEWAMNVGDAKGQIMDAVIREYRPSLVLELGAYCGYSAVRMARLLPPGARLLTMEINPDYAA  
 ITQQLDFAGLQDKVSILIGASQDLIPQLKKKYDVTLDMVFLDHWKDRYLPDTLLLEECGLLRKGTVLL  
 ADNVI VPGTPDFLAYVRGSSSFECTHYSSYLEYMKVVDGLEKAVYQGPSSSPVK

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Restriction Sites:** SgfI-MluI

**Cloning Scheme:**

Cloning sites used for ORF Shuttling:



\* The last codon before the Stop codon of the ORF

**ACCN:** NM\_007744

**ORF Size:** 798 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\\_007744.3](#)

**RefSeq Size:** 2128 bp

**RefSeq ORF:** 798 bp

**Locus ID:** 12846

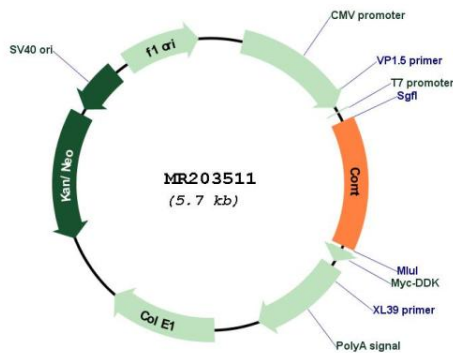
**UniProt ID:** [O88587](#)

**Cytogenetics:** 16 11.4 cM

**MW:** 29.5 kDa

**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]

### Product images:



Circular map for MR203511