

Product datasheet for **SC324870**

COMT (NM_001135161) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	COMT (NM_001135161) Human Untagged Clone
Tag:	Tag Free
Symbol:	COMT
Synonyms:	HEL-S-98n
Vector:	<u>pCMV6 series</u>
Fully Sequenced ORF:	>NCBI ORF sequence for NM_001135161, the custom clone sequence may differ by one or more nucleotides ATGCCGGAGGCCCGCCTCTGCTGTTGGCAGCTGTGTTGCTGGGCCTGGTGTGCTGCTGGT GTGCTGTGCTGCTTCTGAGGCACTGGGGCTGGGGCTGTGCCTTATCGGCTGGAACGAG TTCATCTGCAGCCCATCCACAACCTGCTCATGGGTGACACCAAGGAGCAGCGCATCCTG AACACGTGCTGCAGCATGCGGAGCCCGGAACGCACAGAGCGTGTGGAGGCCATTGAC ACCTACTGCGAGCAGAAGGAGTGGGCCATGAACGTGGGCGACAAGAAAGGCAAGATCGTG GACGCCGTGATTCAGGAGCACCAGCCCTCCGTGCTGCTGGAGCTGGGGCCTACTGTGGC TACTCAGTGTGGCATGGCCCGCTGCTGTACCAGGGGCGAGGCTCATCACCATCGAG ATCAACCCGACTGTGCCGCATCACCCAGCGGATGGTGGATTTGCTGGCGTGAAGGAC AAGTCAACCTTGTGGTTGGAGCGTCCCAGGACATCATCCCCAGCTGAAGAAGAAGTAT GATGTGGACACTGGACATGGTCTTCTCGACCACTGGAAGGACCGGTACCTGCCGGAC ACGCTTCTCTGGAGGAATGTGGCTGCTGCGGAAGGGGACAGTGTACTGGCTGACAAC GTGATCTGCCAGGTGCCCAGACTTCTAGCACACGTGCGCGGGAGCAGCTGCTTTGAG TGCACACACTACCAATCGTTCTGGAATACAGGGAGGTGGTGGACGGCCTGGAGAAGGCC ATCTACAAGGGCCAGGCAGCGAAGCAGGGCCC
Restriction Sites:	Please inquire
ACCN:	NM_001135161
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
OTI Annotation:	This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.
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).



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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_001135161.1](#), [NP_001128633.1](#)

RefSeq Size: 2262 bp

RefSeq ORF: 816 bp

Locus ID: 1312

UniProt ID: [P21964](#)

Cytogenetics: 22q11.21

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Metabolic pathways, Tyrosine metabolism

Gene Summary: Catechol-O-methyltransferase catalyzes the transfer of a methyl group from S-adenosylmethionine to catecholamines, including the neurotransmitters dopamine, epinephrine, and norepinephrine. This O-methylation results in one of the major degradative pathways of the catecholamine transmitters. In addition to its role in the metabolism of endogenous substances, COMT is important in the metabolism of catechol drugs used in the treatment of hypertension, asthma, and Parkinson disease. COMT is found in two forms in tissues, a soluble form (S-COMT) and a membrane-bound form (MB-COMT). The differences between S-COMT and MB-COMT reside within the N-termini. Several transcript variants are formed through the use of alternative translation initiation sites and promoters. [provided by RefSeq, Sep 2008]

Transcript Variant: This variant (2) differs in the 5' UTR compared to variant 1. Variants 1, 2, 3, and 5 all encode isoform MB-COMT and may also make the shorter isoform S-COMT at a low level. MB-COMT is a membrane-bound protein. Sequence Note: This RefSeq record was created from transcript and genomic sequence data because no single transcript was available for the full length of the gene. The extent of this transcript is supported by transcript alignments.