

Recombinant Human COMT, His-tagged

Cat. No. COMT-26252TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full length protein, corresponding to amino acids 1-221 of Human COMT with N terminal His tag; MWt 30kDa.
Species	Human
Source	E.coli
ProteinLength	1-221 a.a.
Description	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.
Conjugation	HIS
Tissue specificity	Brain, liver, placenta, lymphocytes and erythrocytes.
Form	Lyophilised:Reconstitute with 80 µl aqua dest.

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Storage buffer	Preservative: None Constituents: 0.5% Trehalose, 6M Urea, 100mM Sodium phosphate, 10mM Sodium chloride, pH 4.5
Storage	Shipped at 4°C. Upon delivery aliquot and store at -80oC. Avoid freeze / thaw cycles.
Sequences of amino acids	MGDTKEQRILNHVLQHAEPGNAQSVLEAIDTYCEQKEWAM NVGDKKGGKIVDAVIQE HQPSVLLELGAYCGYSAVRMAR LLSPGARLITIEINPDCAAITQRMVDFAGVKDKVTL VV GASQDIIPQLKKKYDVTLD MVFLDHWKDRYLPDTLLL EECGLLRKGTVLLADN VICPGAPDFLAHV RGSSCFECTHYQSFLEYREVVDGLEKAIYKGPGSEAGP
Sequence Similarities	Belongs to the mammalian catechol-O-methyltransferase family.
Full Length	Full L.

GENE INFORMATION

Gene Name	COMT catechol-O-methyltransferase [Homo sapiens]
Official Symbol	COMT
Synonyms	COMT; catechol-O-methyltransferase; catechol O-methyltransferase;
Gene ID	1312
mRNA Refseq	NM_000754
Protein Refseq	NP_000745
Uniprot ID	P21964
Chromosome	22q11.21

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Location	
Pathway	Biogenic Amine Synthesis, organism-specific biosystem; Biological oxidations, organism-specific biosystem; Dopamine clearance from the synaptic cleft, organism-specific biosystem; Dopaminergic synapse, organism-specific biosystem; Dopaminergic synapse, conserved biosystem;
Function	O-methyltransferase activity; catechol O-methyltransferase activity; magnesium ion binding; transferase activity;

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