

Recombinant Human COMT

Cat. No. COMT-27960TH **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant fragment of Human COMT ; 221aa, 24.4 kDa.
Species	Human
Source	E.coli
ProteinLength	221 amino acids
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.
Molecular Weight	24.400kDa
Tissue specificity	Brain, liver, placenta, lymphocytes and erythrocytes.
Form	Liquid

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Purity	>95% by SDS-PAGE
Storage buffer	pH: 8.00 Constituents: 10% Glycerol, 0.01% Magnesium chloride, 0.32% Tris HCl
Storage	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Sequences of amino acids	MGDTKEQRILNHVLQHAEPGNAQSVLEAIDTYCEQKEWAM NVGDKKGGKIVDAVIQE HQPSVLLELGAYCGYSAVRMARLL SPGARLITIEINPDCAAITQRMVDFAGVKDKVTL VVGASQ DIIPQLKKKYDVDTLDMVFLDHWKDRYLPDTLLLEECGLL RKGTVLLADN VICPGAPDFLAHVVRGSSCFECTHYQSFLY REVVDGLEKAIYKGPSEAGP
Sequence Similarities	Belongs to the mammalian catechol-O-methyltransferase family.

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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