

Recombinant Human COMT Protein, His/SUMOpro-tagged

Cat. No. COMT-021H Lot. No. (See product label)

SPECIFICATION

Product Overview	Active recombinant N-terminal His and SUMOpro tagged full length human COMT protein (2-221) was expressed in E. coli.
Species	Human
Source	E.coli
ProteinLength	2-221
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 Mass	37.6 kDa
Purity	≥70% estimated by SDS-PAGE
Unit Definition	One unit produces 1 nmol/hr of O-methylated products from 3,4-

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dihydroxyacetophenone (DHAP) with S-adenosyl-L-methionine (SAM) as substrate at pH 7.6, 37 centigrade, measured by absorbance at 344 nm.

Applications ELISA, WB, and Enzyme activity assay

Stability ≥ 1 year

Storage At -80 centigrade.

Storage Buffer 50 mM Hepes, pH 8.0, with 500 mM NaCl and 10% glycerol

GENE INFORMATION

Gene Name [COMT catechol-O-methyltransferase \[Homo sapiens \(human\) \]](#)

Official Symbol [COMT](#)

Synonyms COMT; catechol-O-methyltransferase; HEL-S-98n; catechol O-methyltransferase; epididymis secretory sperm binding protein Li 98n; testicular tissue protein Li 42; EC 2.1.1.6

Gene ID [1312](#)

mRNA Refseq [NM_000754](#)

Protein Refseq [NP_000745](#)

MIM [116790](#)

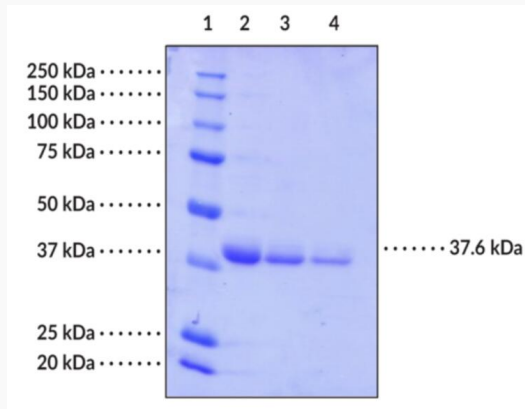
UniProt ID [P21964](#)

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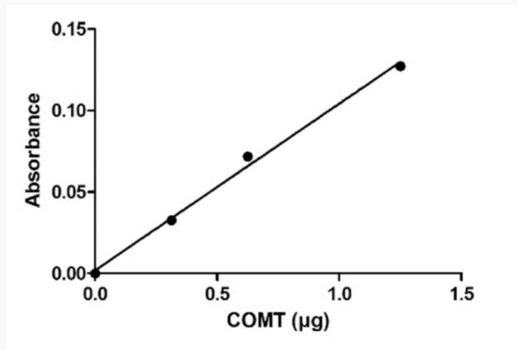
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**SDS-PAGE analysis
of COMT**



Lane 1: MW Markers
Lane 2: S-COMT (4 µg)
Lane 3: S-COMT (2 µg)
Lane 4: S-COMT (1 µg)



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