

Active Recombinant Human COMT protein, His-tagged

Cat. No. COMT-826H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Active Recombinant Human COMT protein(P21964)(52-271 aa), fused with N-terminal His tag, was expressed in E.coli.
Species	Human
Source	E.coli
ProteinLength	52-271 aa
Form	20mM Tris, 150mM NaCl, pH8.0, containing 1mM EDTA, 1mM DTT, 0.01% SKL, 5% Trehalose and Proclin300.
Bio-activity	Catechol-O-Methyltransferase (COMT) is one of several enzymes that degrade catecholamines (such as dopamine, epinephrine, and norepinephrine), catecholestrogens, and various drugs and substances having a catechol structure. Two isoforms of COMT are produced: the soluble short form (S-COMT) and the membrane bound long form (MB-COMT). COMT is involved in the inactivation of the catecholamine neurotransmitters (dopamine, epinephrine, and norepinephrine). The enzyme introduces a methyl group to the catecholamine, which is donated by S-adenosyl methionine (SAM). Any compound having a catechol structure, like catecholestrogens and catechol-containing flavonoids, are substrates of COMT. Besides, UDP glucuronosyltransferase 2 family, polypeptide B1 (UGT2B1) has been identified as an interactor of COMT, thus a binding ELISA assay was conducted to detect the interaction of recombinant human COMT and recombinant human

 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

UGT2B1. Briefly, COMT were diluted serially in PBS, with 0.01% BSA (pH 7.4). Duplicate samples of 100uL were then transferred to UGT2B1-coated microtiter wells and incubated for 2h at 37°C. Wells were washed with PBST and incubated for 1h with anti-COMT pAb, then aspirated and washed 3 times. After incubation with HRP labelled secondary antibody, wells were aspirated and washed 3 times. With the addition of substrate solution, wells were incubated 15-25 minutes at 37°C. Finally, add 50μ stop solution to the wells and read at 450nm immediately. The binding activity of COMT and UGT2B1 was shown, and this effect was in a dose dependent manner.

Molecular Mass	25.6kDa
Endotoxin	<1.0EU per 1μg (determined by the LAL method).
Purity	> 90%
Storage	Avoid repeated freeze/thaw cycles. Store at 2-8°C for one month. Store at -20°C for 12 months. Aliquot and store at -80°C for 12 months.
Reconstitution	Reconstitute in 20mM Tris, 150mM NaCl (pH8.0) to a concentration of 0.1-1.0 mg/mL. Do not vortex.

GENE INFORMATION

Gene Name	COMT catechol-O-methyltransferase [Homo sapiens]
Official Symbol	COMT
Synonyms	COMT; catechol-O-methyltransferase; catechol O-methyltransferase;
Gene ID	1312

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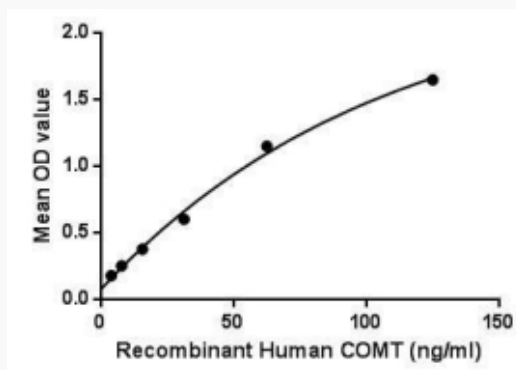
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mRNA Refseq [NM_000754](#)

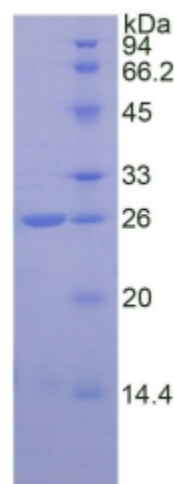
Protein Refseq [NP_000745](#)

UniProt ID [P21964](#)

Activity



SDS-PAGE



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