

Recombinant human COMT protein

Catalog Number: COM0905

PRODUCT INFORMATION

Expression system

E.coli

Domain

51-271aa

UniProt No.

P21964

NCBI Accession No.

NP_000745.1

Alternative Names

Catechol-O-methyltransferase, COMT

PRODUCT SPECIFICATION

Molecular Weight

24.4 kDa (221aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 1mM MgCl₂, 10% glycerol

Purity

> 95% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

Non-Tagged

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Catechol-O-methyltransferase (COMT) is an enzyme that catalyses the transfer of the methyl group of S-adenosylmethionine (SAM) into catechol substrates such as levodopa, dopamine, epinephrine, and norepinephrine in the presence of Mg²⁺. COMT appears to be located in the postsynaptic neuron and plays roles in the metabolism of catechol estrogens and the inactivation of catecholamine neurotransmitters though

Recombinant human COMT protein

Catalog Number: COM0905

enzymatic degradation. COMT inhibitors prevent levodopa degradation, increase its availability and are used in the treatment of patients with Parkinson's disease. Recombinant human COMT protein was expressed in *E. coli* and purified by using conventional chromatography techniques.

Amino acid Sequence

MGDTKEQRIL NHVLQHAEPG NAQSVLEAID TYCEQKEWAM NVGDKKGKIV DAVIQEHQPS VLLELGAYCG YSAVRMARLL
SPGARLITIE INPDCAAITQ RMVDFAGVKD KVTLVVGASQ DIIPQLKKKY DVDTLDMVFL DHWKDRYLPD TLLLEECGLL
RKGTVLLADN VICPGAPDFL AHVRGSSCFE CTHYQSFLEY REVVDGLEKA IYKGGPSEAG P

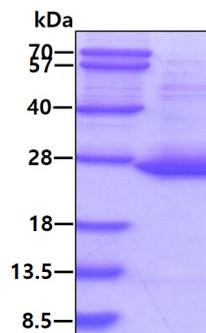
General References

Cotton NJ., et al. (2004) *J Biol Chem.* 279(22):23710-8.

Dawling S., et al. (2001) *Cancer Res.* 61(18):6716-22.

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.