

Anti-COMT Antibody

Catalog # ABO11513

Specification

Anti-COMT Antibody - Product Information

ApplicationWB, IHC-PPrimary AccessionP21964HostRabbitReactivityHumanClonalityPolyclonalFormatLyophilizedDescriptionRabbit IgG polyclonal antibody for Catechol O-methyltransferase(COMT) detection. Tested withWB, IHC-P in Human.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-COMT Antibody - Additional Information

Gene ID 1312

Other Names Catechol O-methyltransferase, 2.1.1.6, COMT

Calculated MW 30037 MW KDa

Application Details Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μg/ml, Human, By Heat
Western blot, 0.1-0.5 μg/ml, Human

Subcellular Localization Isoform Soluble: Cytoplasm.

Tissue Specificity Brain, liver, placenta, lymphocytes and erythrocytes.

Protein Name Catechol O-methyltransferase

Contents Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg Thimerosal, 0.05mg NaN3.

Immunogen A synthetic peptide corresponding to a sequence at the N-terminus of human COMT(94-108aa DKKGKIVDAVIQEHQ).

Purification



Immunogen affinity purified.

Cross Reactivity No cross reactivity with other proteins

Storage

At -20°C for one year. After r°Constitution, at 4°C for one month. It°Can also be aliquotted and stored frozen at -20°C for a longer time.Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the class I-like SAM-binding methyltransferase superfamily. Cation-dependent Omethyltransferase family.

Anti-COMT Antibody - Protein Information

Name COMT (HGNC:2228)

Function

Catalyzes the O-methylation, and thereby the inactivation, of catecholamine neurotransmitters and catechol hormones. Also shortens the biological half-lives of certain neuroactive drugs, like L-DOPA, alpha-methyl DOPA and isoproterenol.

Cellular Location [Isoform Soluble]: Cytoplasm

Tissue Location Brain, liver, placenta, lymphocytes and erythrocytes

Anti-COMT Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-COMT Antibody - Images





Anti-COMT antibody, ABO11513, Western blottingLane 1: HELA Cell LysateLane 2: A375 Cell LysateLane 3: PANC Cell Lysate



Anti-COMT antibody, ABO11513, IHC(P)IHC(P): Human Kidney Cancer Tissue



Anti-COMT antibody, ABO11513, IHC(P)IHC(P): Human Lung Cancer Tissue Anti-COMT Antibody - Background



Catechol O-methyltransferase, also called COMT, is one of the major mammalian enzymes involved in the metabolic degradation of catecholamines. This gene is mapped to 22q11.21. 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.