

Anti-COMT Antibody
Catalog # ABO11513**Specification**

Anti-COMT Antibody - Product Information

Application	WB, IHC-P
Primary Accession	P21964
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Catechol O-methyltransferase(COMT) detection. Tested with WB, 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 reconstitution, 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 O-methyltransferase 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

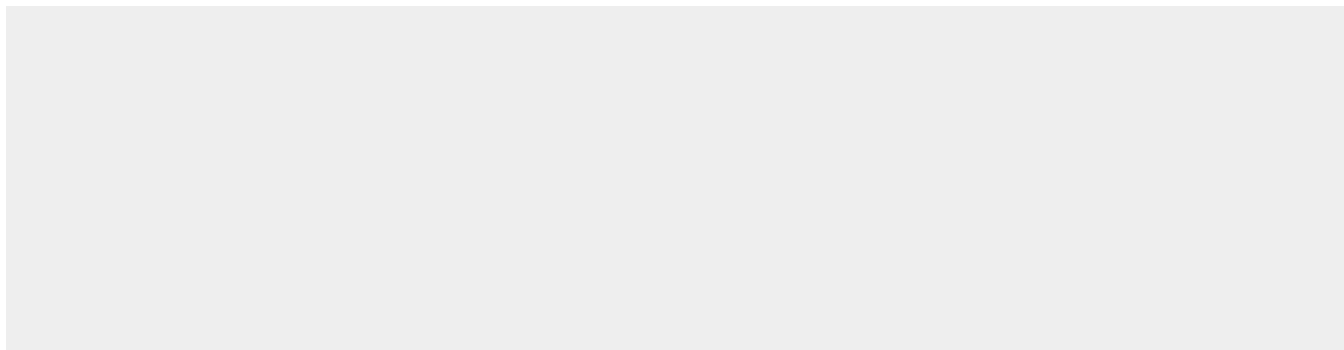
Tissue Location

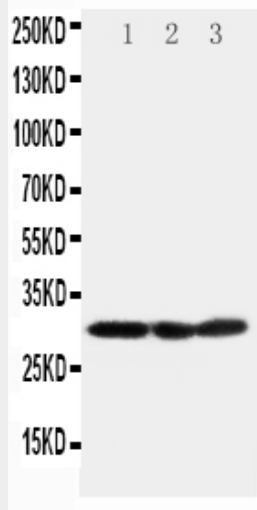
Brain, liver, placenta, lymphocytes and erythrocytes

Anti-COMT Antibody - Protocols

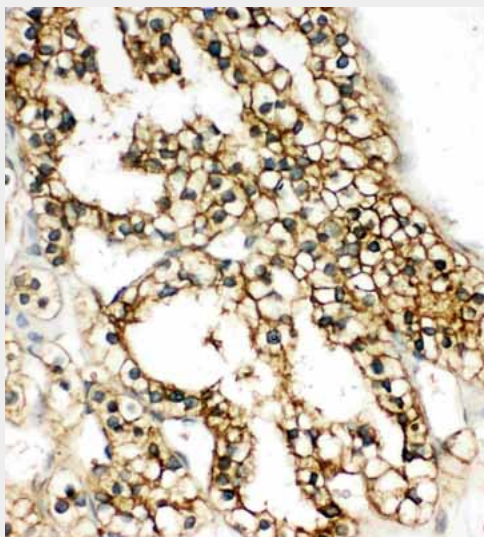
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

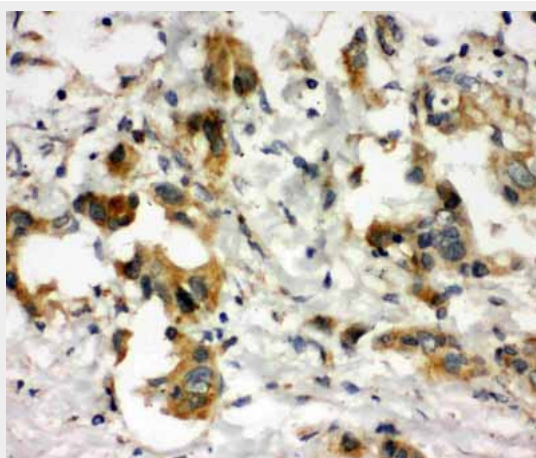
Anti-COMT Antibody - Images



Anti-COMT antibody, ABO11513, Western blotting
Lane 1: HELA Cell Lysate
Lane 2: A375 Cell Lysate
Lane 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.