

# Anti-COMT Antibody

Catalog # ABO11513

## Product Information

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|--------------------------|------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IHC-P                                                                                                        |
| <b>Primary Accession</b> | <a href="#">P21964</a>                                                                                           |
| <b>Host</b>              | Rabbit                                                                                                           |
| <b>Reactivity</b>        | Human                                                                                                            |
| <b>Clonality</b>         | Polyclonal                                                                                                       |
| <b>Format</b>            | Lyophilized                                                                                                      |
| <b>Description</b>       | 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.

## Additional Information

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|                                 |                                                                                                                                                                 |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 1312                                                                                                                                                            |
| <b>Other Names</b>              | Catechol O-methyltransferase, 2.1.1.6, COMT                                                                                                                     |
| <b>Calculated MW</b>            | 30037                                                                                                                                                           |
| <b>Application Details</b>      | Immunohistochemistry(Paraffin-embedded Section), 0.5-1 $\mu$ g/ml, Human, By Heat<br>Western blot, 0.1-0.5 $\mu$ g/ml, Human                                    |
| <b>Subcellular Localization</b> | Isoform Soluble: Cytoplasm.                                                                                                                                     |
| <b>Tissue Specificity</b>       | Brain, liver, placenta, lymphocytes and erythrocytes.                                                                                                           |
| <b>Source</b>                   | Eukaryota                                                                                                                                                       |
| <b>Protein Name</b>             | Catechol O-methyltransferase                                                                                                                                    |
| <b>Contents</b>                 | Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg Thimerosal, 0.05mg Na <sub>3</sub> .                                    |
| <b>Immunogen</b>                | A synthetic peptide corresponding to a sequence at the N-terminus of human COMT(94-108aa DKKGKIVDAVIQEHQ).                                                      |
| <b>Purification</b>             | Immunogen affinity purified.                                                                                                                                    |
| <b>Cross Reactivity</b>         | No cross reactivity with other proteins                                                                                                                         |
| <b>Storage</b>                  | 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 |

## Sequence Similarities

freezing and thawing.

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

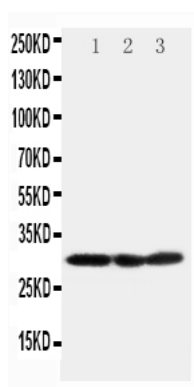
## Protein Information

|                   |                                                                                                                                                                                                                                              |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name              | COMT ( <a href="#">HGNC:2228</a> )                                                                                                                                                                                                           |
| 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                                                                                                                                                                                         |

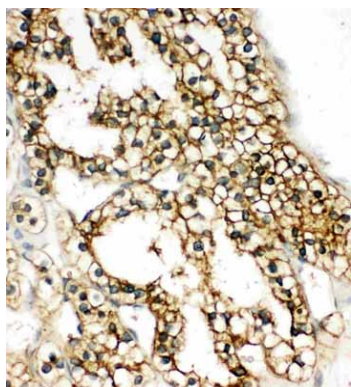
## Background

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.

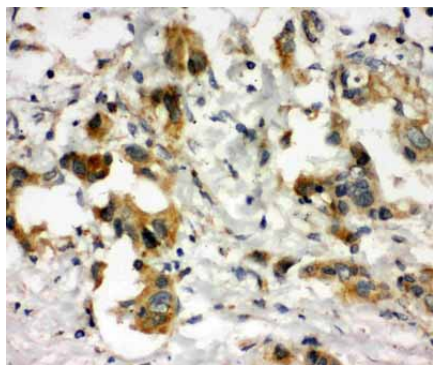
## Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.