

**COMT Antibody (N-term) (Ascites)**  
**Mouse Monoclonal Antibody (Mab)**  
**Catalog # AM2164a****Specification**

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**COMT Antibody (N-term) (Ascites) - Product Information**

Application	WB,E
Primary Accession	<a href="#">P21964</a>
Other Accession	<a href="#">NP_000745.1</a>
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1
Calculated MW	30037
Antigen Region	37-65

**COMT Antibody (N-term) (Ascites) - Additional Information****Gene ID** 1312**Other Names**

Catechol O-methyltransferase, COMT

**Target/Specificity**

This COMT antibody is generated from mice immunized with a KLH conjugated synthetic peptide between 37-65 amino acids from the N-terminal region of human COMT.

**Dilution**

WB~~1:500~1000

**Format**

Mouse monoclonal antibody supplied in crude ascites with 0.09% (W/V) sodium azide.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

COMT Antibody (N-term) (Ascites) is for research use only and not for use in diagnostic or therapeutic procedures.

**COMT Antibody (N-term) (Ascites) - 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

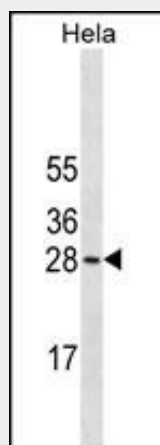
**Tissue Location**

Brain, liver, placenta, lymphocytes and erythrocytes

**COMT Antibody (N-term) (Ascites) - 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](#)

**COMT Antibody (N-term) (Ascites) - Images**

COMT Antibody (N-term)(Ascites)(Cat. #AM2164a) western blot analysis in HeLa cell line lysates (35µg/lane). This demonstrates the COMT antibody detected the COMT protein (arrow).

**COMT Antibody (N-term) (Ascites) - Background**

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. Several transcript variants are formed through the use of alternative translation initiation sites and promoters.

**COMT Antibody (N-term) (Ascites) - References**

Paloyelis, Y., et al. Neuropsychopharmacology 35(12):2414-2426(2010)  
Stroth, S., et al. Neurobiol Learn Mem 94(3):364-372(2010)  
Lim, J.H., et al. Pharmacogenet. Genomics 20(10):605-610(2010)  
Demetrovics, Z., et al. Compr Psychiatry 51(5):510-515(2010)  
Bodenmann, S., et al. Sleep 33(8):1027-1035(2010)