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COMT Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant COMT.
Catalog # AT1588a

Product Information

Application	WB, E
Primary Accession	P21964
Other Accession	BC000419
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2b kappa
Clone Names	1G4-1A1
Calculated MW	30037

Additional Information

Gene ID	1312
Other Names	Catechol O-methyltransferase, COMT
Target/Specificity	COMT (AAH00419.2, 1 a.a. ~ 182 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	COMT Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

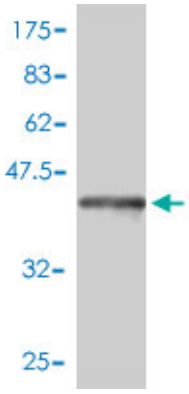
Background

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.

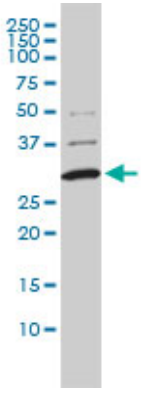
References

Effects of modafinil on the sleep EEG depend on Val158Met genotype of COMT. Bodenmann S, et al. Sleep, 2010 Aug 1. PMID 20815183.Impact of aerobic exercise training on cognitive functions and affect associated to the COMT polymorphism in young adults. Stroth S, et al. Neurobiol Learn Mem, 2010 Aug 26. PMID 20800689.DAT1 and COMT Effects on Delay Discounting and Trait Impulsivity in Male Adolescents with Attention Deficit/Hyperactivity Disorder and Healthy Controls. Paloyelis Y, et al. Neuropsychopharmacology, 2010 Aug 25. PMID 20736997.Genetic polymorphism of catechol-O-methyltransferase and cytochrome P450c17? in preeclampsia. Lim JH, et al. Pharmacogenet Genomics, 2010 Oct. PMID 20729792.Association between Novelty Seeking of opiate-dependent patients and the catechol-O-methyltransferase Val(158)Met polymorphism. Demetrovics Z, et al. Compr Psychiatry, 2010 Sep-Oct. PMID 20728009.

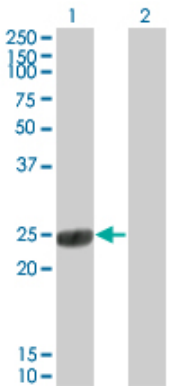
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (45.76 KDa) .

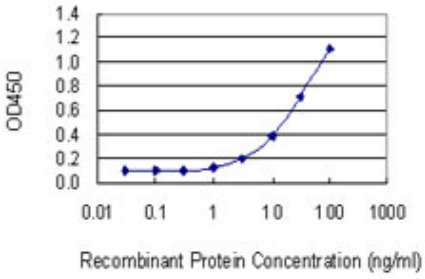


COMT monoclonal antibody (M01), clone 1G4-1A1
Western Blot analysis of COMT expression in A-431 ((Cat # AT1588a)



Western Blot analysis of COMT expression in transfected 293T cell line by COMT monoclonal antibody (M01), clone 1G4-1A1.

Lane 1: COMT transfected lysate(24.4 KDa).
Lane 2: Non-transfected lysate.



Detection limit for recombinant GST tagged COMT is 0.3 ng/ml as a capture antibody.

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