



COMT Monoclonal Antibody

Catalog No	YP-mAb-03781
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	COMT
Protein Name	Catechol O-methyltransferase
Immunogen	The antiserum was produced against synthesized peptide derived from human COMT. AA range:61-110
Specificity	COMT Monoclonal Antibody detects endogenous levels of COMT protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	COMT; Catechol O-methyltransferase
Observed Band	30kD
Cell Pathway	[Isoform Soluble]: Cytoplasm .; [Isoform Membrane-bound]: Cell membrane ; Single-pass type II membrane protein ; Extracellular side .
Tissue Specificity	Brain, liver, placenta, lymphocytes and erythrocytes.
Function	catalytic activity:S-adenosyl-L-methionine + a catechol = S-adenosyl-L-homocysteine + a guaiacol.,cofactor:Binds 1 magnesium ion per subunit.,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.,mass spectrometry: PubMed:8020475,online information:Catechol-O-methyl transferase entry,polymorphism:Low enzyme activity alleles are associated with genetic susceptibility to alcoholism [MIM:103780].,polymorphism:Two alleles, COMT*1 or COMT*H with Val-158 and COMT*2 or COMT*L with Met-158 are responsible for a three to four-fold difference in enzymatic activity.,PTM:The N-terminus is blocked.,similarity:Belongs to the mammalian catechol-O-methyltransferase family.,tissue specificity:Brain, liver, placenta,



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. [provided by RefSeq, Sep 2008],

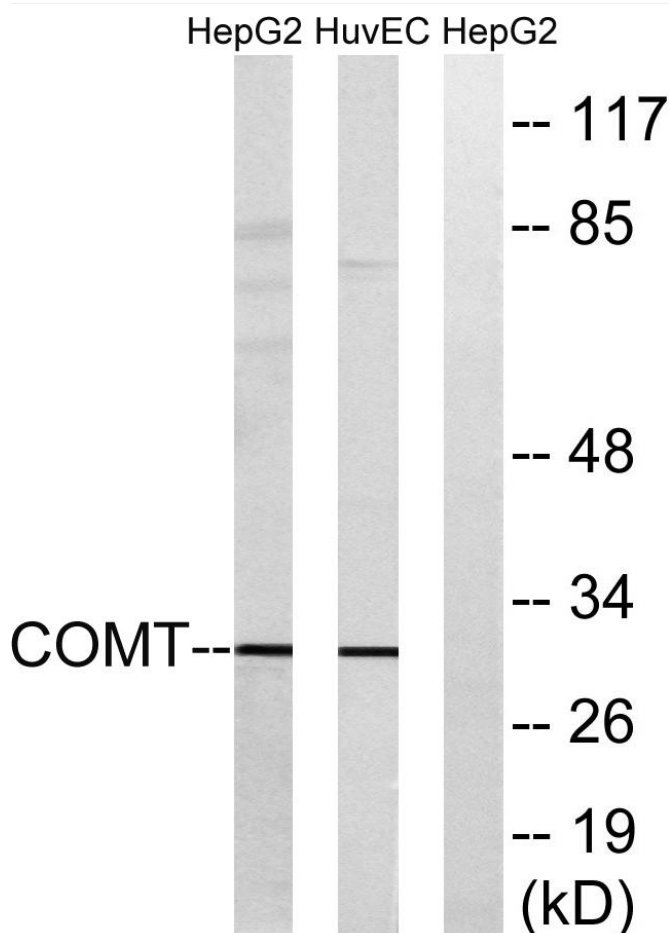
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using COMT Monoclonal Antibody