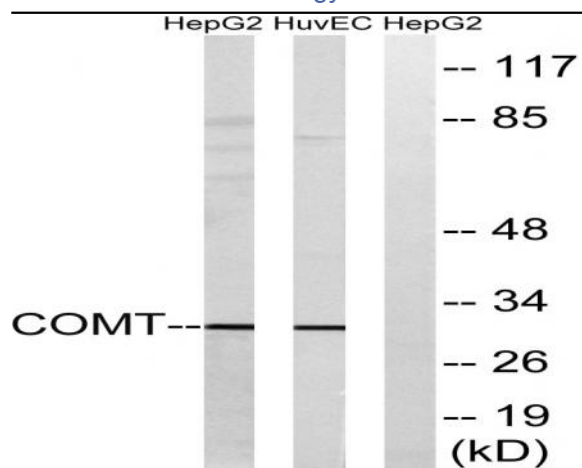


COMT Polyclonal Antibody

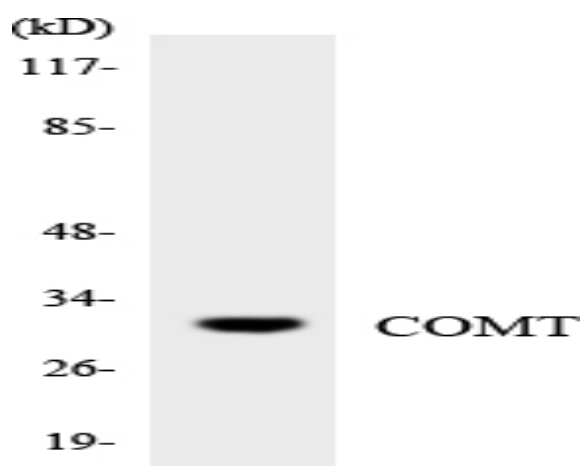
Catalog No :	YT1040
Reactivity :	Human;Rat;Mouse;
Applications :	WB;ELISA
Target :	COMT
Fields :	>>Steroid hormone biosynthesis;>>Tyrosine metabolism;>>Metabolic pathways;>>Dopaminergic synapse
Gene Name :	COMT
Protein Name :	Catechol O-methyltransferase
Human Gene Id :	1312
Human Swiss Prot No :	P21964
Mouse Swiss Prot No :	O88587
Immunogen :	The antiserum was produced against synthesized peptide derived from human COMT. AA range:61-110
Specificity :	COMT Polyclonal Antibody detects endogenous levels of COMT protein.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG
Dilution :	WB 1:500 - 1:2000. ELISA: 1:20000. Not yet tested in other applications.
Purification :	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Concentration :	1 mg/ml
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band :	30kD
Cell Pathway :	Steroid hormone biosynthesis;Tyrosine metabolism;
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],
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,
Subcellular Location :	[Isoform Soluble]: Cytoplasm .; [Isoform Membrane-bound]: Cell membrane ; Single-pass type II membrane protein ; Extracellular side .
Expression :	Brain, liver, placenta, lymphocytes and erythrocytes.

Products Images



Western blot analysis of lysates from HUVEC and HepG2 cells, using COMT Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from Jurkat cells using COMT antibody.