



# CP51A Monoclonal Antibody

Catalog No	YP-mAb-05060
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	CYP51A1 CYP51
Protein Name	Lanosterol 14-alpha demethylase (LDM) (EC 1.14.13.70) (CYPLI) (Cytochrome P450 51A1) (Cytochrome P450-14DM) (Cytochrome P45014DM) (Cytochrome P450LI) (Sterol 14-alpha demethylase)
Immunogen	Synthesized peptide derived from human protein . at AA range: 210-290
Specificity	CP51A Monoclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, 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	
Observed Band	55kD
Cell Pathway	Endoplasmic reticulum membrane ; Single-pass membrane protein . Microsome membrane ; Single-pass membrane protein .
Tissue Specificity	Ubiquitously expressed with highest levels in testis, ovary, adrenal, prostate, liver, kidney and lung.
Function	catalytic activity:Obtusifoliol + 3 O(2) + 3 NADPH = 4-alpha-methyl-5-alpha-ergosta-8,14,24(28)-trien-3-beta-ol + formate + 3 NADP(+) + 4 H(2)O.,cofactor:Heme group.,function:Catalyzes C14-demethylation of lanosterol; it transforms lanosterol into 4,4'-dimethyl cholesta-8,14,24-triene-3-beta-ol.,pathway:Steroid biosynthesis; zymosterol biosynthesis; zymosterol from lanosterol: step 1/6.,similarity:Belongs to the cytochrome P450 family.,tissue specificity:Ubiquitously expressed with highest levels in testis, ovary, adrenal, prostrate, liver, kidney and lung.,
Background	cytochrome P450 family 51 subfamily A member 1(CYP51A1) Homo sapiens This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This endoplasmic reticulum protein participates in the synthesis of



cholesterol by catalyzing the removal of the 14 $\alpha$ -methyl group from lanosterol. Homologous genes are found in all three eukaryotic phyla, fungi, plants, and animals, suggesting that this is one of the oldest cytochrome P450 genes. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Mar 2009],

**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