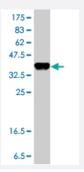


# CYP51A1 polyclonal antibody (A01)

Catalog # H00001595-A01 Size 50 uL

### **Applications**



Western Blot detection against Immunogen (37.11 KDa).

Specification	
Product Description	Mouse polyclonal antibody raised against a partial recombinant CYP51A1.
Immunogen	CYP51A1 (NP_000777, 410 a.a. ~ 509 a.a) partial recombinant protein with GST tag.
Sequence	SPTVNQRLKDSWVERLDFNPDRYLQDNPASGEKFAYVPFGAGRHRCIGENFAYVQIKTIWSTMLR LYEFDLIDGYFPTVNYTTMIHTPENPVIRYKRRSK
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (97); Rat (98)
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (37.11 KDa).
Storage Buffer	50 % glycerol
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## **Applications**



Western Blot (Recombinant protein)

**Protocol Download** 

ELISA

Gene Info — CYP51A1	
Entrez GeneID	<u>1595</u>
GeneBank Accession#	NM_000786
Protein Accession#	NP_000777
Gene Name	CYP51A1
Gene Alias	CP51, CYP51, CYPL1, LDM, P450-14DM, P450L1
Gene Description	cytochrome P450, family 51, subfamily A, polypeptide 1
Omim ID	<u>601637</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	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 particip ates in the synthesis of cholesterol by catalyzing the removal of the 14alpha-methyl group from lan osterol. Homologous genes are found in all three eukaryotic phyla, fungi, plants, and animals, sug gesting 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
Other Designations	cytochrome P450, 51 (lanosterol 14-alpha-demethylase) cytochrome P450, family 51 lanosterol 14-alpha-demethylase sterol 14-alpha demethylase

### Publication Reference

 Amyloid precursor protein α- and β-cleaved ectodomains exert opposing control of cholesterol homeostasis via SREBP2.

Wang W, Mutka AL, Zmrzljak UP, Rozman D, Tanila H, Gylling H, Remes AM, Huttunen HJ, Ikonen E.

FASEB Journal 2014 Feb; 28(2):849.

Application: WB-Tr, Human, U251MG cells





 Variation of cholesterol contents in porcine cumulus-oocyte complexes is a key factor in regulation of fertilizing capacity.

Watanabe H, Hirai S, Tateno H, Fukui Y.

Theriogenology 2012 Dec; 79(4):680.

Application: IHC-P, Pig, Porcine ovaries

#### Pathway

- Biosynthesis of alkaloids derived from terpenoid and polyketide
- Biosynthesis of plant hormones
- Biosynthesis of terpenoids and steroids
- Metabolic pathways
- Steroid biosynthesis

#### Disease

Kidney Failure