

Recombinant Human CYP51A1, GST-tagged

Cat. No. CYP51A1-11794H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human CYP51A1 protein, fused to GST-tag, was expressed in E.coli and purified by GSH-sepharose.
Species	Human
Source	E.coli
ProteinLength	146-509a.a.
Description	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 14α-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.
Storage	The protein is stored in PBS buffer at -20°C. Avoid repeated freezing and thawing cycles.
Storage Buffer	1M PBS (58mM Na ₂ HPO ₄ , 17mM NaH ₂ PO ₄ , 68mM NaCl, pH8.) added with 100mM GSH and 1% Triton X-100, 15% glycerol.

GENE INFORMATION

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Gene Name	CYP51A1 cytochrome P450, family 51, subfamily A, polypeptide 1 [Homo sapiens]
Official Symbol	CYP51A1
Synonyms	CP51; CP51A_HUMAN; CYP51; CYP51A1; CYPLI; Cytochrome P450 51; Cytochrome P450 51A1; Cytochrome P450-14DM; Cytochrome P45014DM; Cytochrome P450LI; Lanosterol 14-alpha demethylase; LDM; P450 14DM; P450L1; Sterol 14-alpha demethylase;
Gene ID	1595
mRNA Refseq	NM_000786.3
Protein Refseq	NP_000777.1
MIM	601637
UniProt ID	Q16850
Chromosome Location	7q21.2
Pathway	Activation of Gene Expression by SREBP (SREBF), organism-specific biosystem; Biological oxidations, organism-specific biosystem; Cholesterol Biosynthesis, organism-specific biosystem; Cholesterol biosynthesis, organism-specific biosystem; Cholesterol biosynthesis, squalene 2,3-epoxide =>cholesterol, organism-specific biosystem; Cholesterol biosynthesis, squalene 2,3-epoxide =>
Function	electron carrier activity; heme binding; iron ion binding; sterol 14-demethylase activity;