

Recombinant Human CYP51A1 Protein, Myc/DDK-tagged, C13 and N15-labeled

Cat. No. CYP51A1-1580H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	CYP51A1 MS Standard C13 and N15-labeled recombinant protein (NP_000777) with a C-terminal MYC/DDK tag, was expressed in HEK293 cells.
Species	Human
Source	HEK293
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.
Molecular Mass	57.3 kDa
AA Sequence	MAAAAGMLLLGLLQAGGSVLGQAMEKVTGGNLLSMLLIACAFTLSLVYLIRLAAGHL VQLPAGVKSPPIYIFSPIPFLGHAIAFGKSPIEFLENAYEKYGPVFSFTMVGKTFTYLLG SDAAALLFNSKNEDLNAEDVYSRLTTPVFGKGVAYDVPNPVFLEQKKMLKSGLNIAH FKQHVSIIKETKEYFESWGESGEKNVFEALSELILTASHCLHGKEIRSQLEKVAQL YADLDGGFSHAAWLLPGWLPLPSFRRRDRAHREIKDIFYKAIQKRRQSQEKIDDILQT

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LLDATYKDGRPLTDDEVAGMLIGLLLAGQHTSSTTSAWMGFFLARDKTLQKKCYLE
 QKTVCGENLPPLTYDQLKDLNLLDRCIKETLRLRPPVMIMMRMARTPQTVAGYTIPP
 GHQVCVSPTVNQRLKDSWVERLDFNPDRYLQDNPASGEKFAYVPFGAGRHRICIGE
 NFAYVQIKTIWSTMLRLYEFDLIDGYFPTVNYTTMIHTPENPVIRYKRRSKTRTRPLEQ
 KLISEEDLAANDILDYKDDDDKV

Purity > 80% as determined by SDS-PAGE and Coomassie blue staining

Stability Stable for 3 months from receipt of products under proper storage and handling conditions.

Storage Store at -80 centigrade. Avoid repeated freeze-thaw cycles.

Concentration 50 µg/mL as determined by BCA

Storage Buffer 100 mM glycine, 25 mM Tris-HCl, pH 7.3.

GENE INFORMATION

Gene Name CYP51A1 cytochrome P450 family 51 subfamily A member 1 [Homo sapiens (human)]

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

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mRNA Refseq NM_000786

Protein Refseq NP_000777

MIM 601637

UniProt ID Q16850

SDS-PAGE



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