

Recombinant Human CYP46A1, His-tagged

Cat. No. CYP46A1-11786H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human CYP46A1 protein, fused to His-tag, was expressed in E.coli and purified by Ni-sepharose.
Species	Human
Source	E.coli
ProteinLength	C-term-300a.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 is expressed in the brain, where it converts cholesterol to 24S-hydroxycholesterol. While cholesterol cannot pass the blood-brain barrier, 24S-hydroxycholesterol can be secreted in the brain into the circulation to be returned to the liver for catabolism.
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 300mM Imidazole and 0.7% Sarcosyl, 15% glycerol.

GENE INFORMATION

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Gene Name	CYP46A1 cytochrome P450, family 46, subfamily A, polypeptide 1 [Homo sapiens]
Official Symbol	CYP46A1
Synonyms	CYP46A1; cytochrome P450, family 46, subfamily A, polypeptide 1; CYP46, cytochrome P450, subfamily 46 (cholesterol 24 hydroxylase); cholesterol 24-hydroxylase; CH24H; cytochrome P450 46A1; cytochrome P450, subfamily 46 (cholesterol 24-hydroxylase); CP46; CYP46;
Gene ID	10858
mRNA Refseq	NM_006668
Protein Refseq	NP_006659
MIM	604087
UniProt ID	Q9Y6A2
Chromosome Location	14q32.1
Pathway	Bile acid and bile salt metabolism, organism-specific biosystem; Biological oxidations, organism-specific biosystem; Cytochrome P450 - arranged by substrate type, organism-specific biosystem; Endogenous sterols, organism-specific biosystem; Metabolism, organism-specific biosystem; Metabolism of lipids and lipoproteins, organism-specific biosystem; Phase 1 - Functionalization of compounds, organism-specific biosystem;
Function	cholesterol 24-hydroxylase activity; electron carrier activity; heme binding; metal ion binding; monooxygenase activity; oxidoreductase activity, acting on paired donors,

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with incorporation or reduction of molecular oxygen; steroid hydroxylase activity;

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