Recombinant Human CYP2E1and Yeast CYP-reductase

Cat. No. CYP2E1-219H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human CYP2E1 and yeast CYP-reductase coexpressed in Saccharomyces cerevisiae.
Species	Human and Yeast
Source	S.Cerevisiae
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 protein localizes to the endoplasmic reticulum and is induced by ethanol, the diabetic state, and starvation. The enzyme metabolizes both endogenous substrates, such as ethanol, acetone, and acetal, as well as exogenous substrates including benzene, carbon tetrachloride, ethylene glycol, and nitrosamines which are premutagens found in cigarette smoke. Due to its many substrates, this enzyme may be involved in such varied processes as gluconeogenesis, hepatic cirrhosis, diabetes, and cancer.
Storage buffer	50 mM Tris (pH 7.4), 1 mM EDTA, 20 % glycerol
concentration	1nmol/ml, spectral measurement
Activitymeasured	p-nitrophenol hydroxylase
Storage	−80°C. Avoid frequent temperature changes. Thaw on ice.

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OfficialSymbol	CYP2E1

GENE INFORMATION

Gene Name	CYP2E1 cytochrome P450, family 2, subfamily E, polypeptide 1 [Homo sapiens]
Synonyms	cytochrome P450, family 2, subfamily E, polypeptide 1; CPE1; CYP2E; P450-J; P450C2E; CYP2E1; cytochrome P450 2E1; CYPIIE1; cytochrome P450-J; microsomal monooxygenase; xenobiotic monooxygenase; 4-nitrophenol 2-hydroxylase; flavoprotein-linked monooxygenase; cytochrome P450, subfamily IIE (ethanol-inducible), polypeptide 1; EC 1.14.13.-,EC 1.14.13.n7
Gene ID	1571
mRNA Refseq	NM_000773
Protein Refseq	NP_000764
MIM	124040
UniProt ID	P05181
Chromosome Location	10q24.3-qter
Pathway	Arachidonic acid metabolism; Drug metabolism - cytochrome P450; Linoleic acid metabolism; Metabolic pathways; Metabolism of xenobiotics by cytochrome P450; Biological oxidations
Function	electron carrier activity; enzyme binding; heme binding; metal ion binding; monooxygenase activity; oxidoreductase activity; oxygen binding; oxidoreductase

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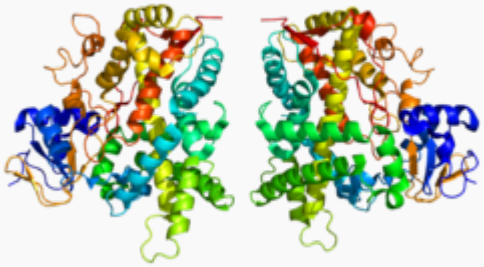
	activity, acting on paired donors, with incorporation or reduction of molecular oxygen, NADH or NADPH as one donor, and incorporation of one atom of oxygen; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, reduced flavin or flavoprotein as one donor, and incorporation of one atom of oxygen
Rendering based onPDB 3E4E.	

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