

## Recombinant Human CYP2E1

**Cat. No.** CYP2E1-450H    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Baculovirus-insect cell expressed with supplemental cDNA expressed reductase and cytochrome b5.
<b>Species</b>	Human
<b>Source</b>	Insect Cells
<b>Description</b>	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.
<b>Form</b>	Liquid; Frozen
<b>Available size</b>	1.0 nmole P450 in 0.5 ml
<b>Representative totalprotein concentration</b>	4.0 mg/ml

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<b>Representative P450content</b>	490 pmole/mg
<b>Catalytic assay</b>	p-Nirophenol hydroxylase
<b>Representativecatalytic assay</b>	6,500 pmole/(mg x min)
<b>Storage</b>	-80°C
<b>OfficialSymbol</b>	CYP2E1

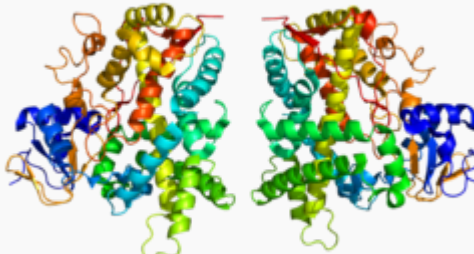
## GENE INFORMATION

<b>Gene Name</b>	CYP2E1 cytochrome P450, family 2, subfamily E, polypeptide 1 [ Homo sapiens ]
<b>Synonyms</b>	cytochrome P450, family 2, subfamily E, polypeptide 1; CPE1; CYP2E; P450-J; P450C2E; CYP2E1; cytochrome P450 2E1; CYP1IE1; 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
<b>Gene ID</b>	1571
<b>mRNA Refseq</b>	NM_000773
<b>Protein Refseq</b>	NP_000764
<b>MIM</b>	124040
<b>UniProt ID</b>	P05181

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<b>Chromosome Location</b>	10q26.3
<b>Pathway</b>	Arachidonic acid metabolism; Drug metabolism - cytochrome P450; Linoleic acid metabolism; Metabolic pathways; Metabolism of xenobiotics by cytochrome P450; Biological oxidations
<b>Function</b>	electron carrier activity; enzyme binding; heme binding; metal ion binding; monooxygenase activity; oxidoreductase activity; oxygen binding; oxidoreductase 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
<b>Rendering based on PDB 3E4E.</b>	

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