

# Active Recombinant Human CYP2E1

**Cat. No.** CYP2E1-547H    **Lot. No.** (See product label)

## SPECIFICATION

<b>Product Overview</b>	Recombinant Human CYP2E1 was expressed in <i>Saccharomyces cerevisiae</i> .
<b>Species</b>	Human
<b>Source</b>	<i>S.Cerevisiae</i>
<b>Description</b>	<p>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.</p>
<b>Form</b>	50 mM Tris (pH 7,4), 1 mM EDTA, 20% glycerol
<b>Bio-activity</b>	activity: ≥500 units/pmol enzyme secondary activity: ≥10 units/pmol enzyme (Reductase activity)
<b>Unit Definition</b>	<p>P450 Activity: One unit will oxidize 1 picomole of p-nitrophenol per minute at pH 7.4 at 30 °C. Reductase Activity: One unit will reduce 1 nanomole of cytochrome C per minute in the presence of NADPH at pH 7.4 at 28 °C.</p>

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<b>Storage</b>	?70°C
<b>Concentration</b>	≤60 mg/mL (Protein) ≥15 pmol/mg protein (P450)
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	CYP2E1 cytochrome P450, family 2, subfamily E, polypeptide 1 [ Homo sapiens (human) ]
<b>Official Symbol</b>	CYP2E1
<b>Synonyms</b>	CYP2E1; CPE1; CYP2E; P450-J; P450C2E; cytochrome P450, family 2, subfamily E, polypeptide 1; cytochrome P450 2E1; CYP1IIE1; cytochrome P450-J; microsomal monooxygenase; xenobiotic monooxygenase; 4-nitrophenol 2-hydroxylase; flavoprotein-linked monooxygenase; cytochrome P450, subfamily IIE (ethanol-inducible), polypeptide 1; NP_000764.1; 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
<b>Chromosome Location</b>	10q26.3
<b>Pathway</b>	Arachidonic acid metabolism; CYP2E1 reactions; Linoleic acid metabolism

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**Function**

enzyme binding; monooxygenase activity; oxidoreductase activity

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