Active Recombinant Human CYP2E1

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

SPECIFICATION

Product Overview	Recombinant Human CYP2E1 was expressed in Saccharomyces cerevisiae.
Species	Human
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.
Form	50 mM Tris (pH 7,4), 1 mM EDTA, 20% glycerol
Bio-activity	activity: ≥500 units/pmol enzymesecondary activity: ≥10 units/pmol enzyme (Reductase activity)
Unit Definition	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.

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Storage	?70°C
Concentration	≤60 mg/mL (Protein)≥15 pmol/mg protein (P450)

GENE INFORMATION

Gene Name	CYP2E1 cytochrome P450, family 2, subfamily E, polypeptide 1 [Homo sapiens (human)]
Official Symbol	CYP2E1
Synonyms	CYP2E1; CPE1; CYP2E; P450-J; P450C2E; cytochrome P450, family 2, subfamily E, polypeptide 1; 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; NP_000764.1; EC 1.14.13.n7
Gene ID	1571
mRNA Refseq	NM_000773
Protein Refseq	NP_000764
MIM	124040
UniProt ID	P05181
Chromosome Location	10q26.3
Pathway	Arachidonic acid metabolism; CYP2E1 reactions; Linoleic acid metabolism

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Function	enzyme binding; monooxygenase activity; oxidoreductase activity

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