

Recombinant Human CYP2C8

Cat. No. CYP2C8-384H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Baculovirus-insect cell expressed with supplemental cDNA expressed human reductase and cytochrome b5. The incorporation of cytochrome b5 in these microsomes increases the cytochrome P450 activity.
Species	Human
Source	Insect Cells
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 its expression is induced by phenobarbital. The enzyme is known to metabolize many xenobiotics, including the anticonvulsive drug mephenytoin, benzo(a)pyrene, 7-ethoxycoumarin, and the anti-cancer drug taxol. This gene is located within a cluster of cytochrome P450 genes on chromosome 10q24. Several transcript variants encoding a few different isoforms have been found for this gene.
Form	Liquid; Frozen
Available size	0.5 nmole P450 in 0.5 ml
Representative total protein concentration	3.0 mg/ml.

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

Representative P450content	370 pmole/mg.
Representative b5content	590 pmole/mg.
Catalytic assay	paclitaxel-6(alpha)-hydroxylase activity
Representative catalyticassay	2,200 pmole/(mg x min)
Storage	-80°C
OfficialSymbol	CYP2C8

GENE INFORMATION

Gene Name	CYP2C8 cytochrome P450, family 2, subfamily C, polypeptide 8 [Homo sapiens (human)]
Synonyms	CYP2C8; CPC8; CYPIIC8; MP-12/MP-20; cytochrome P450, family 2, subfamily C, polypeptide 8; cytochrome P450 2C8; P450 form 1; cytochrome P450 IIC2; cytochrome P450 MP-12; cytochrome P450 MP-20; cytochrome P450 form 1; microsomal monooxygenase; xenobiotic monooxygenase; s-mephenytoin 4-hydroxylase; flavoprotein-linked monooxygenase; cytochrome P450, subfamily IIC (mephenytoin 4-hydroxylase), polypeptide 8; EC 1.14.14.1
Gene ID	1558
mRNA Refseq	NM_000770
Protein Refseq	NP_000761

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MIM	601129
UniProt ID	P10632
Chromosome Location	10q23.33
Pathway	Arachidonate Epoxygenase / Epoxide Hydrolase; Arachidonic acid metabolism; Biological oxidations
Function	aromatase activity; caffeine oxidase activity; electron carrier activity
PDB rendering basedon 1pq2.	

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