Active Recombinant Human CYP2C9 1(Wild type allele)

Cat. No. CYP2C9-543H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant Human Cytochrome P450 2C9*1 (Wild type allele) was expressed in E. coli.
Species	Human
Source	E.coli
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 rifampin. The enzyme is known to metabolize many xenobiotics, including phenytoin, tolbutamide, ibuprofen and S-warfarin. Studies identifying individuals who are poor metabolizers of phenytoin and tolbutamide suggest that this gene is polymorphic. The gene is located within a cluster of cytochrome P450 genes on chromosome 10q24.
Bio-activity	12-88 units/mg protein
Molecular Mass	mol wt 54423.1 g/mol
Unit Definition	One unit will convert 1.0 nanomole of diclofenac (2-(2,6-dichloranilino) phenylacetic acid) 4`-hydroxylated product per minute at pH 7.4 at 37 °C.
Storage	?70°C

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Concentration	3.5-25 mg protein/mL (protein)50-150 nmol/mL (P450)6-14 nmol/mg protein (specific content)

GENE INFORMATION

Gene Name	CYP2C9 cytochrome P450, family 2, subfamily C, polypeptide 9 [Homo sapiens (human)]
Official Symbol	CYP2C9
Synonyms	CYP2C9; CPC9; CYP2C; CYP2C10; CYPIIC9; P450IIC9; cytochrome P450, family 2, subfamily C, polypeptide 9; cytochrome P450 2C9; cytochrome P-450MP; cytochrome P450 PB-1; microsomal monooxygenase; xenobiotic monooxygenase; flavoprotein-linked monooxygenase; cytochrome P-450 S-mephenytoin 4-hydroxylase; NP_000762.2; EC 1.14.13.48; EC 1.14.13.49; EC 1.14.13.80
Gene ID	1559
mRNA Refseq	NM_000771
Protein Refseq	?NP_000762
MIM	601130
UniProt ID	P11712
Chromosome Location	10q24
Pathway	Arachidonate Epoxygenase / Epoxide Hydrolase; Arachidonic acid metabolism; Drug metabolism - cytochrome P450

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Function	(R)-limonene 6-monooxygenase activity; drug binding; heme binding

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