Active Recombinant Human CYP2C18 Protein

Cat. No. CYP2C18-29H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human CYP2C18 and human CYP-reductase without tag was coexpressed in Escherichia coli. Amount: 0.5 nmol cytochrome P450
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 but its specific substrate has not yet been determined. The gene is located within a cluster of cytochrome P450 genes on chromosome 10q24. An additional gene, CYP2C17, was once thought to exist; however, CYP2C17 is now considered an artefact based on a chimera of CYP2C18 and CYP2C19. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.
Bio-activity	Cytochrome c Reductase Activity: 100 nmol/min/mg protein P450 Activity Data(Unless otherwise stated, all assays are carried out at 37 centigrade in 50 mM potassium phosphate buffer (pH 7.4) containing 5 mM magnesium chloride and an NADPH generating system [5 mM glucose 6-phosphate, 1 mM NADP+, 1 U/ml glucose 6-phosphate dehydrogenase]) Activity: Diclofenac 4'-hydroxylase

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

	Linear with time up to: 8 min(Determined at 40 μM substrate, using a P450 concentration of 250 pmol/ml) Linear with P450 up to: 250 pmol/ml(Determined at 40 μM substrate, using an incubation time of 5 min) Vmax: 0.42 pmol/min/pmol CYP Km: 33 μM
Usage	For laboratory (research) purposes only.
Storage	Store at -80 centigrade. Avoid frequent temperature changes. Thaw on ice.
Concentration	P450 Concentration: 1.0 nmol/ml Protein Concentration: 10.0 mg/ml Specific P450 Content: 100 pmol/mg protein
Storage Buffer	50 mM Tris-acetate (pH 7.6), 250 mM sucrose, 0.25 mM EDTA

GENE INFORMATION

Gene Name	CYP2C18 cytochrome P450 family 2 subfamily C member 18 [Homo sapiens (human)]
Official Symbol	CYP2C18
Synonyms	CYP2C18; cytochrome P450 family 2 subfamily C member 18; CPCI; CYP2C; CYP2C17; P450IIC17; P450-6B/29C; cytochrome P450 2C18; (S)-mephenytoin hydroxylase associated cytochrome P450; CYPIIC18; cytochrome P450, family 2, subfamily C, polypeptide 18; cytochrome P450, subfamily IIC (mephenytoin 4-hydroxylase), polypeptide 17; cytochrome P450, subfamily IIC (mephenytoin 4-hydroxylase), polypeptide 18; cytochrome P450-6B/29C; flavoprotein-linked monooxygenase; microsomal monooxygenase; unspecific monooxygenase; EC

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

	1.14.14.1
Gene ID	1562
mRNA Refseq	NM_000772
Protein Refseq	NP_000763
MIM	601131
UniProt ID	P33260

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