

## Active Recombinant Human CYP2C18 Protein

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

### SPECIFICATION

<b>Product Overview</b>	<p>Recombinant human CYP2C18 and human CYP-reductase without tag was coexpressed in Escherichia coli.</p> <p>Amount: 0.5 nmol cytochrome P450</p>
<b>Species</b>	Human
<b>Source</b>	E.coli
<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 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.</p>
<b>Bio-activity</b>	<p>Cytochrome c Reductase Activity: 100 nmol/min/mg protein</p> <p>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])</p> <p>Activity: Diclofenac 4'-hydroxylase</p>

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Linear with time up to: 8 min(Determined at 40  $\mu$ M substrate, using a P450 concentration of 250 pmol/ml)  
 Linear with P450 up to: 250 pmol/ml(Determined at 40  $\mu$ M substrate, using an incubation time of 5 min)  
 Vmax: 0.42 pmol/min/pmol CYP  
 Km: 33  $\mu$ M

**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; CYP1IC18; 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

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<b>Gene ID</b>	1562
<b>mRNA Refseq</b>	NM_000772
<b>Protein Refseq</b>	NP_000763
<b>MIM</b>	601131
<b>UniProt ID</b>	P33260

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