

## Active Recombinant Human CYP4F2 Protein

**Cat. No.** CYP4F2-10H    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant human CYP4F2 and human CYP-reductase without tag was coexpressed in Escherichia coli, supplemented with purified human cytochrome b5. Amount: 0.5 nmol cytochrome P450
<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.</p> <p>This protein localizes to the endoplasmic reticulum. The enzyme starts the process of inactivating and degrading leukotriene B4, a potent mediator of inflammation. This gene is part of a cluster of cytochrome P450 genes on chromosome 19. Another member of this family, CYP4F11, is approximately 16 kb away.</p>
<b>Bio-activity</b>	<p>Cytochrome c Reductase Activity: 161 nmol/min/mg protein</p> <p>P450 Activity Data(Unless otherwise stated, all assays are carried out at 37 centigrade in 100 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: Leukotriene B4 <math>\omega</math>-hydroxylase</p> <p>Linear with time up to: 30 min(Determined at 20 <math>\mu</math>M substrate, using a P450 concentration of 50 pmol/ml)</p>

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	<p>Linear with P450 up to: 50 pmol/ml(Determined at 40 <math>\mu</math>M substrate, using an incubation time of 10 min)</p> <p>Vmax: 2.7 pmol/min/pmol CYP</p> <p>Km: 107 <math>\mu</math>M</p>
<b>Usage</b>	For laboratory (research) purposes only.
<b>Storage</b>	Store at -80 centigrade. Avoid frequent temperature changes. Thaw on ice.
<b>Concentration</b>	<p>P450 Concentration: 1.0 nmol/ml</p> <p>Cytochrome b5 Concentration: 5.0 nmol/ml</p> <p>Protein Concentration: 10.0 mg/ml</p> <p>Specific P450 Content: 100 pmol/mg protein</p>
<b>Storage Buffer</b>	50 mM Tris-acetate (pH 7.6), 250 mM sucrose, 0.25 mM EDTA
<b>GENE INFORMATION</b>	
<b>Gene Name</b>	CYP4F2 cytochrome P450 family 4 subfamily F member 2 [ Homo sapiens (human) ]
<b>Official Symbol</b>	CYP4F2
<b>Synonyms</b>	CYP4F2; cytochrome P450 family 4 subfamily F member 2; CPF2; cytochrome P450 4F2; 20-HETE synthase; 20-hydroxyeicosatetraenoic acid synthase; CYP1VF2; arachidonic acid omega-hydroxylase; cytochrome P450, family 4, subfamily F, polypeptide 2; cytochrome P450, subfamily IVF, polypeptide 2; cytochrome P450-LTB-omega; docosahexaenoic acid omega-hydroxylase; leukotriene-B(4) 20-monooxygenase 1; leukotriene-B(4) omega-hydroxylase 1; phylloquinone omega-hydroxylase CYP4F2; EC 1.14.14.1; EC 1.14.14.78; EC 1.14.14.79; EC 1.14.14.94
<b>Gene ID</b>	8529

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mRNA Refseq	NM_001082
Protein Refseq	NP_001073
MIM	604426
UniProt ID	P78329

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