

Active Recombinant Human CYP4F2 Protein

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

SPECIFICATION

Product Overview	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
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. 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.
Bio-activity	Cytochrome c Reductase Activity: 161 nmol/min/mg protein 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]) Activity: Leukotriene B4 ω-hydroxylase Linear with time up to: 30 min(Determined at 20 μM substrate, using a P450 concentration of 50 pmol/ml)

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	Linear with P450 up to: 50 pmol/ml(Determined at 40 μM substrate, using an incubation time of 10 min) Vmax: 2.7 pmol/min/pmol CYP Km: 107 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 Cytochrome b5 Concentration: 5.0 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	CYP4F2 cytochrome P450 family 4 subfamily F member 2 [Homo sapiens (human)]
Official Symbol	CYP4F2
Synonyms	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
Gene ID	8529

mRNA Refseq	NM_001082
Protein Refseq	NP_001073
MIM	604426
UniProt ID	P78329

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