Active Recombinant Human CYP4F3 Protein

Cat. No. CYP4F3-21H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human CYP4F3B 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, CYP4F3, 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, CYP4F8, is approximately 18 kb away. Several transcript variants encoding two different isoforms have been found for this gene.
Bio-activity	Cytochrome c Reductase Activity: 435 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

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	Linear with time up to: 15 min(Determined at 10 μM substrate, using a P450 concentration of 8 pmol/ml) Linear with P450 up to: 20 pmol/ml(Determined at 10 μM substrate, using an incubation time of 5 min) Vmax: 6.1 pmol/min/pmol CYP Km: 2.2 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	CYP4F3 cytochrome P450 family 4 subfamily F member 3 [Homo sapiens (human)]
Official Symbol	CYP4F3
Synonyms	CYP4F3; cytochrome P450 family 4 subfamily F member 3; CPF3; CYP4F; LTB4H; CYPIVF3; cytochrome P450 4F3; 20-HETE synthase; 20-hydroxyeicosatetraenoic acid synthase; cytochrome P-450; cytochrome P450, family 4, subfamily F, polypeptide 3; cytochrome P450, subfamily IVF, polypeptide 3 (leukotriene B4 omega hydroxylase); cytochrome P450-LTB-omega; docosahexaenoic acid omega-hydroxylase CYP4F3; leukotriene B4 omega hydroxylase; leukotriene-B(4) 20-monooxygenase 2; leukotriene-B(4) omega-hydroxylase 2; leukotriene-B4 20-monooxygenase; EC 1.14.14.1; EC 1.14.14.79; EC 1.14.14.94

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Gene ID	4051
mRNA Refseq	NM_000896
Protein Refseq	NP_000887
MIM	601270
UniProt ID	Q08477

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