

Active Recombinant Human CYP4A11 Protein

Cat. No. CYP4A11-84H Lot. No. (See product label)

SPECIFICATION

Product Overview	Recombinant human CYP4A11 protein and human CYP-reductase without tag were coexpressed in E. coli.
Species	Human
Source	E.coli
Description	<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 and hydroxylates medium-chain fatty acids such as laurate and myristate. Multiple transcript variants have been found for this gene.</p>
Bio-activity	<p>Cytochrome c Reductase Activity: 247 nmol/min/mg protein</p> <p>P450 Activity Data(Unless otherwise stated, all assays are carried out at 37 centigrade in 100 mM Tris-HCl 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: Lauric acid 12-hydroxylase</p> <p>Linear with time up to: 20 min(Determined at 10 μM substrate, using a P450 concentration of 10 pmol/ml)</p> <p>Linear with P450 up to: 120 pmol/ml(Determined at 10 μM substrate, using an incubation time of 5 min)</p>

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	Vmax: 3.5 min ⁻¹ Km: 2.9 μ M
Usage	For laboratory (research) purposes only
Storage	Store at -80 centigrade. Avoid frequent temperature changes. Thaw on ice.
Concentration	P450 Concentration: 4.0 nmol/ml Protein Concentration: 7.7 mg/ml Specific P450 Content: 519 pmol/mg protein
Storage Buffer	50 mM Tris-acetate (pH 7.6), 250 mM sucrose, 0.25 mM EDTA
GENE INFORMATION	
Gene Name	CYP4A11 cytochrome P450 family 4 subfamily A member 11 [Homo sapiens (human)]
Official Symbol	CYP4A11
Synonyms	CYP4A11; cytochrome P450 family 4 subfamily A member 11; CP4Y; CYP4A2; CYP4A11; CYP4A11; CYP4A11; cytochrome P450 4A11; 20-HETE synthase; 20-hydroxyeicosatetraenoic acid synthase; P450HL-omega; alkane-1 monooxygenase; cytochrome P-450HK-omega; cytochrome P450, family 4, subfamily A, polypeptide 11; cytochrome P450, subfamily IVA, polypeptide 11; cytochrome P450HL-omega; fatty acid omega-hydroxylase; lauric acid omega-hydroxylase; long-chain fatty acid omega-monooxygenase
Gene ID	1579
mRNA Refseq	NM_000778

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Protein Refseq	NP_000769
MIM	601310
UniProt ID	Q02928

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