

Active Recombinant Pig CYP2E1 Protein

Cat. No. CYP2E1-134P **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant pig CYP2E1 protein and CYP-reductase without tag were coexpressed in E. coli.
Species	Pig
Source	E.coli
Description	A cytochrome P450 monooxygenase involved in the metabolism of fatty acids. Mechanistically, uses molecular oxygen inserting one oxygen atom into a substrate, and reducing the second into a water molecule, with two electrons provided by NADPH via cytochrome P450 reductase (NADPH--hemoprotein reductase). Catalyzes the hydroxylation of carbon-hydrogen bonds. Hydroxylates fatty acids specifically at the omega-1 position displaying the highest catalytic activity for saturated fatty acids. May be involved in the oxidative metabolism of xenobiotics.
Bio-activity	Cytochrome c Reductase Activity: 367 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: Chlorzoxazone 6-hydroxylase Linear with time up to: 15 min(Determined at 100 μM substrate, using a P450 concentration of 100 pmol/ml) Linear with P450 up to: 160 pmol/ml(Determined at 100 μM substrate, using an

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

	incubation time of 5 min) Vmax: 3.2 pmol/min/pmol CYP Km: 132 μ M
Usage	For laboratory (research) purposes only
Storage	Store at -80 centigrade. Avoid frequent temperature changes. Thaw on ice.
Concentration	P450 Concentration: 9.9 nmol/ml Cytochrome b5 Concentration: 49.4 nmol/ml Protein Concentration: 17.7 mg/ml
Storage Buffer	50 mM Tris-acetate (pH 7.6), 250 mM sucrose, 0.25 mM EDTA

GENE INFORMATION

Gene Name	CYP2E1 cytochrome P450, family 2, subfamily E, polypeptide 1 [<i>Sus scrofa</i> (pig)]
Official Symbol	CYP2E1
Synonyms	CYP2E1; cytochrome P450, family 2, subfamily E, polypeptide 1; cytochrome P450 2E1; 4-nitrophenol 2-hydroxylase; CYP1IIE1; cytochrome P-450-J; cytochrome P450-J
Gene ID	403216
mRNA Refseq	NM_214421
Protein Refseq	NP_999586
UniProt ID	P79383

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA