

Active Recombinant Rhesus monkey CYP1B1 Protein

Cat. No. CYP1B1-130R **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant rhesus monkey CYP1B1 protein and human CYP-reductase without tag were coexpressed in E. coli.
Species	Rhesus macaque
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. The enzyme encoded by this gene localizes to the endoplasmic reticulum and metabolizes procarcinogens such as polycyclic aromatic hydrocarbons and 17beta-estradiol. Mutations in this gene have been associated with primary congenital glaucoma; therefore it is thought that the enzyme also metabolizes a signaling molecule involved in eye development, possibly a steroid.
Bio-activity	Cytochrome c Reductase Activity: 90 nmol/min/mg protein P450 Activity Data(Unless otherwise stated, all assays are carried out at 37 centigrade in 50 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: 7-ethoxyresorufin O-deethylase Linear with time up to: 6 min(Determined at 0.1 μM substrate, using a P450 concentration of 2 pmol/ml)

 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

	Linear with P450 up to: 2 pmol/ml(Determined at 0.1 μM substrate, using an incubation time of 5 min) Vmax: 1.2 pmol/min/pmol CYP Km: 0.07 μM
Usage	For laboratory (research) purposes only
Storage	Store at -80 centigrade. Avoid frequent temperature changes. Thaw on ice.
Concentration	P450 Concentration: 5.5 nmol/ml Protein Concentration: 7.8 mg/ml Specific P450 Content: 705 pmol/mg protein
Storage Buffer	50 mM Tris-acetate (pH 7.6), 250 mM sucrose, 0.25 mM EDTA

GENE INFORMATION

Gene Name	CYP1B1 cytochrome P450, family 1, subfamily B, polypeptide 1 [<i>Macaca mulatta</i> (Rhesus monkey)]
Official Symbol	CYP1B1
Synonyms	CYP1B1; cytochrome P450, family 1, subfamily B, polypeptide 1; cytochrome P450 1B1
Gene ID	710385
mRNA Refseq	NM_001266868
Protein Refseq	NP_001253797

 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

UniProt ID

H9Z5P7

 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