Recombinant Human POR, GST-tagged

Cat. No. POR-217H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant full-length human POR was expressed by baculovirus in Sf9 insect cells using an N-terminal GST tag.
Species	Human
Source	Sf9 Cells
Description	POR is a flavoprotein that donates electrons to all microsomal P450 enzymes, including the steroidogenic enzymes P450c17, P450c21, and CYP51A1. POR encodes an endoplasmic reticulum membrane oxidoreductase with an FAD-binding domain and a flavodoxin-like domain which binds two cofactors, FAD and FMN, which allow it to donate electrons directly from NADPH to all microsomal P450 enzymes. POR has been linked with various diseases, including apparent combined P450C17 and P450C21 deficiency, amenorrhea and disordered steroidogenesis, congenital adrenal hyperplasia and Antley-Bixler syndrome.
Form	Recombinant protein stored in 50mM Tis-HCl, pH 7.5, 50mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.
Molecular Mass	~102 kDa
Purity	>95% by densitometry
Applications	Western Blot

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Storage	Store product at –70 centigrade. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.
Concentration	0.1 μg/μl

GENE INFORMATION

Gene Name	POR P450 (cytochrome) oxidoreductase [Homo sapiens]
Official Symbol	POR
Synonyms	POR; P450 (cytochrome) oxidoreductase; NADPH--cytochrome P450 reductase; CYPOR; FLJ26468; NADPH-dependent cytochrome P450 reductase; CPR; P450R; DKFZp686G04235;
Gene ID	5447
mRNA Refseq	NM_000941
Protein Refseq	NP_000932
MIM	124015
UniProt ID	P16435
Chromosome Location	7q11.2
Pathway	1,25-dihydroxyvitamin D3 biosynthesis, organism-specific biosystem; 1,25-dihydroxyvitamin D3 biosynthesis, conserved biosystem; melatonin degradation I,

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	organism-specific biosystem; melatonin degradation I, conserved biosystem; superpathway of melatonin degradation, conserved biosystem; superpathway of melatonin degradation, organism-specific biosystem;
Function	FMN binding; NADP binding; NADPH-hemoprotein reductase activity; NADPH-hemoprotein reductase activity; cytochrome-b5 reductase activity; electron carrier activity; enzyme binding; flavin adenine dinucleotide binding; hydrolase activity; iron ion binding; iron-cytochrome-c reductase activity; oxidoreductase activity;

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