

# Recombinant human POR protein

Catalog Number: ATGP4107

## PRODUCT INFORMATION

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### Expression system

Baculovirus

### Domain

43-677aa

### UniProt No.

P16435

### NCBI Accession No.

NP\_001382342.1

### Alternative Names

NADPH--cytochrome P450 reductase, NADPH--cytochrome P450 reductase, CPR, CYPOR, P450R

## PRODUCT SPECIFICATION

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### Molecular Weight

73kDa (642aa)

### Concentration

0.5mg/ml (determined by absorbance at 280nm)

### Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

### Purity

> 95% by SDS-PAGE

### Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

### Biological Activity

Specific activity is > 1,500 pmol/min/ug, and is defined as the amount of enzyme that catalyze the reduction of 1.0 pmole cytochrome C by NADPH per minute at pH8.0 at 25C.

### Tag

His-Tag

### Application

SDS-PAGE, Enzyme Activity

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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# Recombinant human POR protein

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## Description

POR, also known as NADPH--cytochrome P450 reductase, is a flavoprotein that donates electrons to all microsomal P450 enzymes. POR is localized to the endoplasmic reticulum, where it is also able to transfer electrons to heme oxygenase and cytochrome b5. It is structurally related to two separate flavoprotein families, ferredoxin nucleotide reductase and flavodoxin. Recombinant human POR, fused to His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

## Amino acid Sequence

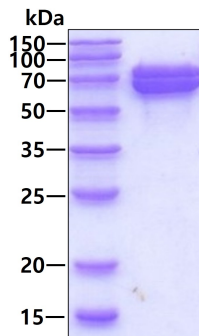
MLFRKKKEEV PEFTKIQTLT SSVRESSFVE KMKKTGRNII VFYGSQTGTA EEFANRLSKD AHRYGMRGMS ADPEEYDLAD  
 LSSLPEIDNA LVVFCMATYG EGDPTDNAQD FYDWLQETDV DLSGVKFAVF GLGNKTYEHF NAMGKYVDKR LEQLGAQRIF  
 ELGLGDDDDGN LEEDFITWRE QFWPAVCEHF GVEATGEESS IRQYELVVHT DIDAAKVYMG EMGRLKSYEN QKPPFDAKNP  
 FLAAVTTNRK LNQGTERHLM HLELDISDSK IRYESGDHVA VYPANDSALV NQLGKILGAD LDVVMNLNNL DEESNKKHPF  
 PCPTSYRTAL TYYLDITNPP RTNVLYELAQ YASEPSEQEL LRKMASSSGE GKELYLSWVV EARRHILAIL QDCPSLRPPI  
 DHLCELLPRL QARYYSIASS SKVHPNSVHI CAVVVEYETK AGRINKGVAT NWLRAKEPAG ENGGALVPM FVRKSQFRLP  
 FKATTPVIMV GPGTGVAPFI GFIQERAWLR QQGKEVGETL LYYGCRSDE DYLYREELAQ FHRDGALTQL NVAFSREQSH  
 KVVYQHLLKQ DREHLWKLIE GGAHIYVCGD ARNMARDVQN TFYDIVAELG AMEHAQAVDY IKKLMTKGRY  
 SLDVWS<HHHH HH>

## General References

Shen A L, et al. (1989). J Biol Chem. 264:7584-7589.  
 Haniju M, et al. (1989). Biochemistry. 28:8639-8645.

## DATA

### SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain