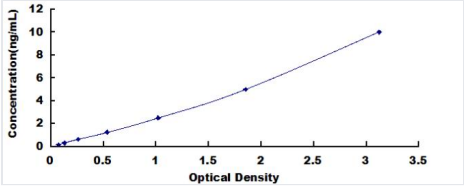
Cytochrome P450 Reductase (CPR) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Cytochrome P450 Reductase (CPR), ELISA Kit
Full Product Name	Human Cytochrome P450 Reductase (CPR) ELISA Kit
Product Gene Name	CPR elisa kit
Product Synonym Names	POR; CYPOR; P450R; P450(Cytochrome)Oxidoreductase; NADPH--cytochrome P450 reductase
Species Reactivity	Human
Assay Type	Sandwich
Samples	Tissue Homogenates, Cell Lysates or Other Biological Fluids.
Detection Range	0.156-10ng/mL
Sensitivity	0.060ng/mL
Preparation and Storage	For unopened kits: All the reagents should be kept at 4 degree C upon receipt. For opened kits: Once the kit is opened, the remaining reagents still need to be stored according to the above storage conditions. In addition, return the unused wells to the foil pouch containing the desiccant pack and reseal along entire edge of zip-seal.
Molecular Weight	76,690 Da
OMIM	124015
3D Structure	ModBase 3D Structure for P16435
RTU ELISA Kit's Advantage	The Ready-To-Use (RTU) Kits require fewer steps in setup and take less time to run. Detection Solutions are pre-diluted and total incubation time is shorter than many other ELISA Kits.
ISO Certification	Manufactured in an ISO 13485:2003 and EN ISO 13485:2012 Certified Laboratory.
Related Product Information for CPR elisa kit	Test Principle: The microtiter plate provided in this kit has been pre-coated with an antibody specific to CPR. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific to CPR. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain CPR, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm ± 10nm. The concentration of CPR in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Other Notes	Small volumes of CPR elisa kit vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CPR purchase	MBS458538 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Cytochrome P450 Reductase (CPR) ELISA Kit target analytes in biological samples. The concentration gradients of the kit standards or positive controls render a theoretical kit detection range in biological research samples containing CPR. The ELISA analytical biochemical technique of the MBS458538 kit is based on CPR antibody-CPR antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CPR antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CPR. Appropriate sample types may include undiluted body fluids and/or tissue homogenates, secretions. Quality control assays assessing reproducibility identified the intra-assay CV (%) and inter-assay CV(%).



Typical Testing Data/Standard Curve (for reference only) of CPR elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CPR. It may not necessarily be applicable to this product.

NCBI GI #	127139033
NCBI GeneID	5447
NCBI Accession #	NP_000932.3
UniProt Primary Accession #	P16435
UniProt Secondary Accession #	Q16455; Q197M5; Q8N181; Q9H3M8; Q9UDT3
UniProt Related Accession #	P16435
GenBank Nucleotide #	NM_000941.2
NCBI Official Full Name	NADPH--cytochrome P450 reductase
NCBI Official Synonym Full Names	cytochrome p450 oxidoreductase
NCBI Official Symbol	POR
NCBI Official Synonym Symbols	CPR; CYPOR; P450R
UniProt Protein Name	NADPH--cytochrome P450 reductase
Protein Family	Probable oxidosqualene cyclase
UniProt Gene Name	POR
UniProt Synonym Gene Names	CPR; P450R
NCBI Protein Information	NADPH--cytochrome P450 reductase
NCBI Summary for CPR	This gene encodes an endoplasmic reticulum membrane oxidoreductase with an FAD-binding domain and a flavodoxin-like domain. The protein binds two cofactors, FAD and FMN, which allow it to donate electrons directly from NADPH to all microsomal P450 enzymes. Mutations in this gene have been associated with various diseases, including apparent combined P450C17 and P450C21 deficiency, amenorrhea and disordered steroidogenesis, congenital adrenal hyperplasia and Antley-Bixler syndrome. [provided by RefSeq, Jul 2008]
UniProt Comments for CPR	This enzyme is required for electron transfer from NADP to cytochrome P450 in microsomes. It can also provide electron transfer to heme oxygenase and cytochrome B5.
Research Articles on CPR	**1.** Suggest that hepatic POR and P450s are coregulated, and that POR plays a complex role in P450-mediated metabolism.
Precautions	All of MyBioSource's Products are for scientific laboratory research purposes and are not for diagnostic, therapeutics, prophylactic or in vivo use. Through your purchase, you expressly represent and warrant to MyBioSource that you will properly test and use any Products purchased from MyBioSource in accordance with industry standards. MyBioSource and its authorized distributors reserve the right to refuse to process any order where we reasonably believe that the intended use will fall outside of our acceptable guidelines.
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Product Note	Select online data sheet information is drawn from bioinformatics databases, occasionally resulting in ambiguous or non-relevant product information. It is the responsibility of the customer to review, verify, and evaluate the information to make sure it matches their requirements before purchasing the kit. Our ELISA Kit assays are dynamic research tools and sometimes they may be updated and improved. If the format of this assay is important to you then please request the current manual or contact our technical support team with a presales inquiry before placing an order. We will confirm the current details of the assay. We cannot guarantee the sample manual posted online is the most current manual, it is intended to serve as an example only. Please refer to the instructions For Use provided with the assay kit for precise details.

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