CYP11B1 Lysate – Tissue Lysate

PRODUCT OVERVIEW

Product Name	CYP11B1, Lysate
Full Product Name	Human CYP11B1 Protein Lysate
Product Gene Name	CYP11B1 lysate
Product Synonym Names	CYP11B1; CPN1; CYP11B; FHI; P450C11
Host	Human
Form/Format	Lyophilized
Preparation and Storage	Store at -20 degree C Once reconsituted, aliquot and store any remaining material at-20 degree C to avoid repeated freeze-thaw cycles.
Molecular Weight	55kDa
OMIM	610613
3D Structure	ModBase 3D Structure for P15538
Related Product Information for CYP11B1 lysate	Human CYP11B1 Protein Lysate 20ug is provided as a Lyophilized powder. This is a Recombinant Protein Lysate produced in HEK293T cells. This protein lysate can be reconsituted using SDS Sample Buffer.
Other Notes	Small volumes of CYP11B1 lysate 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 CYP11B1 purchase	MBS8410202 is a lysate targeting CYP11B1. Also known as Human CYP11B1 Protein Lysate. Host: Human.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CYP11B1. It may not necessarily be applicable to this product.

NCBI GI #	61743918
NCBI GeneID	1584
NCBI Accession #	NP_000488
UniProt Primary Accession #	P15538
UniProt Related Accession #	P15538
GenBank Nucleotide #	NM_000497
NCBI Official Full Name	cytochrome P450 11B1, mitochondrial isoform 1
NCBI Official Synonym Full Names	cytochrome P450 family 11 subfamily B member 1
NCBI Official Symbol	CYP11B1
NCBI Official Synonym Symbols	FHI; CPN1; CYP11B; P450C11
UniProt Protein Name	Cytochrome P450 11B1, mitochondrial
UniProt Synonym Protein Names	CYPXIB1; Cytochrome P-450c11; Cytochrome P450C11; Steroid 11-beta-hydroxylase (EC:1.14.15.4)

Protein Family	Cytochrome
UniProt Gene Name	CYP11B1
UniProt Synonym Gene Names	S11BH; Cytochrome P450C11
UniProt Entry Name	C11B1_HUMAN
NCBI Protein Information	cytochrome P450 11B1, mitochondrial
NCBI Summary for CYP11B1	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. This protein localizes to the mitochondrial inner membrane and is involved in the conversion of progesterone to cortisol in the adrenal cortex. Mutations in this gene cause congenital adrenal hyperplasia due to 11-beta-hydroxylase deficiency. Transcript variants encoding different isoforms have been noted for this gene. [provided by RefSeq, Jul 2008]
UniProt Comments for CYP11B1	CYP11B1: Has steroid 11-beta-hydroxylase activity. In addition to this activity, the 18 or 19-hydroxylation of steroids and the aromatization of androstendione to estrone have also been ascribed to cytochrome P450 XIB. Defects in CYP11B1 are the cause of adrenal hyperplasia type 4 (AH4). AH4 is a form of congenital adrenal hyperplasia, a common recessive disease due to defective synthesis of cortisol. Congenital adrenal hyperplasia is characterized by androgen excess leading to ambiguous genitalia in affected females, rapid somatic growth during childhood in both sexes with premature closure of the epiphyses and short adult stature. Four clinical types: salt wasting (SW, the most severe type), simple virilizing (SV, less severely affected patients), with normal aldosterone biosynthesis, non-classic form or late onset (NC or LOAH), and cryptic (asymptomatic). AH4 patients usually have hypertension. Defects in CYP11B1 are a cause of familial hyperaldosteronism type 1 (FH1). It is a disorder characterized by hypertension, variable hyperaldosteronism, and abnormal adrenal steroid production, including 18-oxocortisol and 18-hydroxycortisol. There is significant phenotypic heterogeneity, and some individuals never develop hypertension. The molecular defect causing hyperaldosteronism familial type 1 is an anti-Lepore-type fusion of the CYP11B1 and CYP11B2 genes. The hybrid gene has the promoting part of CYP11B1, ACTH-sensitive, and the coding part of CYP11B2. Belongs to the cytochrome P450 family. 2 isoforms of the human protein are produced by alternative splicing. Protein type: Oxidoreductase; EC 1.14.15.4; Lipid Metabolism - C21-steroid hormone; Mitochondrial; Lipid Metabolism - androgen and estrogen Chromosomal Location of Human Ortholog: 8q21 Cellular Component: mitochondrion; mitochondrial inner membrane Molecular Function: steroid 11-beta-monooxygenase activity; iron ion binding; heme binding Biological Process: steroid metabolic process; regulation of blood pressure; xenobiotic metabolic process; C21-steroid hormone biosynthetic process; immune response; glucocorticoid biosynthetic process; glucose homeostasis; sterol metabolic process; aldosterone biosynthetic process; cellular response to hormone stimulus Disease: Glucocorticoid-remediable Aldosteronism; Adrenal Hyperplasia, Congenital, Due To Steroid 11-beta-hydroxylase Deficiency
Research Articles on CYP11B1	**1.** p.L340P CYP11B1 mutation is associated with 11beta-Hydroxylase deficiency.
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.
Disclaimer	While every efforts were made to ensure the accuracy of the information provided in this datasheet, MyBioSource will not be liable for any omissions or errors contained herein. MyBioSource reserves the right to make changes to this datasheet at any time without prior notice. It is the responsibility of the customer to report product performance issues to MyBioSource within 30 days of receipt of the product. Please visit our Terms & Conditions page for more information.

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.

For Research Use Only. Not for use in diagnostic or therapeutic procedures.

MyBioSource | Tel: +1.858.633.0165 | Fax: +1.858.633.0166 | mybiosource.com/contact-us
Online datasheet: https://www.mybiosource.com/lysate/cyp11b1/8410202