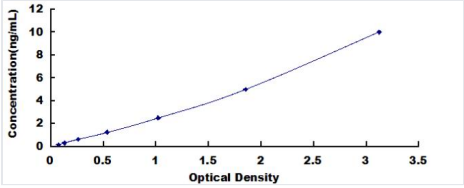
Cytochrome B-245 Beta Poly (CYBb) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Cytochrome b-245 Beta Polypeptide (CYBb), ELISA Kit
Full Product Name	Human Cytochrome b-245 Beta Polypeptide (CYBb) ELISA Kit
Product Gene Name	CYBb elisa kit
Product Synonym Names	CGD; GP91PHOX; NOX2; Neutrophil cytochrome b91; Cytochrome b558 beta; Heme-binding membrane glycoprotein gp91phox; Superoxide-generating NADPH oxidase heavy chain
Species Reactivity	Human
Assay Type	Sandwich
Samples	Tissue Homogenates, Cell Lysates or Other Biological Fluids.
Detection Range	0.156-10ng/mL
Sensitivity	0.055ng/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	65,336 Da
OMIM	300481
3D Structure	ModBase 3D Structure for P04839
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 CYBb elisa kit	Test Principle: The microtiter plate provided in this kit has been pre-coated with an antibody specific to CYBb. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific to CYBb. 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 CYBb, 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 CYBb in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Other Notes	Small volumes of CYBb 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 CYBb purchase	MBS458718 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Cytochrome b-245 Beta Polypeptide (CYBb) 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 CYBb. The ELISA analytical biochemical technique of the MBS458718 kit is based on CYBb antibody-CYBb antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect CYBb antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, CYBb. 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 CYBb elisa kit

ADDITIONAL DETAILS

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

NCBI GI #	6996021
NCBI GeneID	1536
NCBI Accession #	NP_000388.2
UniProt Primary Accession #	P04839
UniProt Secondary Accession #	Q2PP16; A8K138
UniProt Related Accession #	P04839
GenBank Nucleotide #	NM_000397.3
NCBI Official Full Name	cytochrome b-245 heavy chain
NCBI Official Synonym Full Names	cytochrome b-245 beta chain
NCBI Official Symbol	CYBB
NCBI Official Synonym Symbols	CGD; NOX2; IMD34; AMCBX2; GP91-1; GP91PHOX; p91-PHOX; GP91-PHOX
UniProt Protein Name	Cytochrome b-245 heavy chain
UniProt Synonym Protein Names	CGD91-phox; Cytochrome b(558) subunit beta; Cytochrome b558 subunit beta; Heme-binding membrane glycoprotein gp91phox; NADPH oxidase 2; Neutrophil cytochrome b 91 kDa polypeptide; Superoxide-generating NADPH oxidase heavy chain subunit; gp91-1; gp91-phox; p22 phagocyte B-cytochrome
Protein Family	Cytochrome
UniProt Gene Name	CYBB
UniProt Synonym Gene Names	Cytochrome b558 subunit beta
NCBI Protein Information	cytochrome b-245 heavy chain
NCBI Summary for CYBb	Cytochrome b (-245) is composed of cytochrome b alpha (CYBA) and beta (CYBB) chain. It has been proposed as a primary component of the microbicidal oxidase system of phagocytes. CYBB deficiency is one of five described biochemical defects associated with chronic granulomatous disease (CGD). In this disorder, there is decreased activity of phagocyte NADPH oxidase; neutrophils are able to phagocytize bacteria but cannot kill them in the phagocytic vacuoles. The cause of the killing defect is an inability to increase the cell's respiration and consequent failure to deliver activated oxygen into the phagocytic vacuole. [provided by RefSeq, Jul 2008]
UniProt Comments for CYBb	Critical component of the membrane-bound oxidase of phagocytes that generates superoxide. It is the terminal component of a respiratory chain that transfers single electrons from cytoplasmic NADPH across the plasma membrane to molecular oxygen on the exterior. Also functions as a voltage-gated proton channel that mediates the H+ currents of resting phagocytes. It participates in the regulation of cellular pH and is blocked by zinc.
Research Articles on CYBb	**1.** Study demonstrates that there is no increase of NOX2 expression in schizophrenic patients. Unexpectedly, however, the study found that NOX2 expression was decreased in patients with bipolar disorder.
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/human-elisa-kits/cytochrome-b-245-beta-polypeptide-cybb/458718