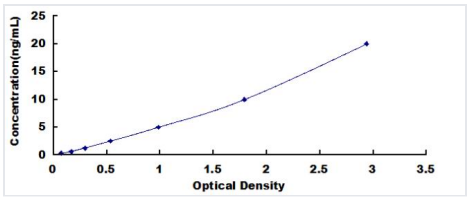
Cytochrome C Oxidase Subunit 1 (COX1) ELISA Kit for Human

PRODUCT OVERVIEW

Product Name	Cytochrome C Oxidase Subunit I (COX1), ELISA Kit
Full Product Name	Human Cytochrome C Oxidase Subunit I (COX1) ELISA Kit
Product Gene Name	COX1 elisa kit
Product Synonym Names	MT-CO1; MTCO1; COI; COXI; Mitochondrially Encoded Cytochrome C Oxidase I; Cytochrome c oxidase polypeptide I
Species Reactivity	Human
Assay Type	Sandwich
Samples	Tissue Homogenates, Cell Lysates or Other Biological Fluids.
Detection Range	0.312-20ng/mL
Sensitivity	0.119ng/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	57,041 Da
OMIM	114500
3D Structure	ModBase 3D Structure for P00395
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 COX1 elisa kit	Test Principle: The microtiter plate provided in this kit has been pre-coated with an antibody specific to COX1. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody preparation specific to COX1. 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 COX1, 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 COX1 in the samples is then determined by comparing the O.D. of the samples to the standard curve.
Other Notes	Small volumes of COX1 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 COX1 purchase	MBS458510 is a ready-to-use microwell, strip-or-full plate ELISA (enzyme-linked immunosorbent assay) Kit for analyzing the presence of the Cytochrome C Oxidase Subunit I (COX1) 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 COX1. The ELISA analytical biochemical technique of the MBS458510 kit is based on COX1 antibody-COX1 antigen interactions (immunosorbency) and an HRP colorimetric detection system to detect COX1 antigen targets in samples. The ELISA Kit is designed to detect native, not recombinant, COX1. 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 COX1 elisa kit

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for COX1. It may not necessarily be applicable to this product.

NCBI GI #	251831109
NCBI GeneID	4512
NCBI Accession #	YP_003024028.1
UniProt Primary Accession #	P00395
UniProt Secondary Accession #	Q34770
UniProt Related Accession #	P00395
GenBank Nucleotide #	NC_012920.1
NCBI Official Full Name	cytochrome c oxidase subunit I (mitochondrion)
NCBI Official Synonym Full Names	mitochondrially encoded cytochrome c oxidase I
NCBI Official Symbol	MT-CO1
NCBI Official Synonym Symbols	COI; MTCO1; COX1
UniProt Protein Name	Cytochrome c oxidase subunit 1
UniProt Synonym Protein Names	Cytochrome c oxidase polypeptide I
UniProt Gene Name	MT-CO1
UniProt Synonym Gene Names	COI; COXI; MTCO1
NCBI Protein Information	cytochrome c oxidase subunit I
UniProt Comments for COX1	Cytochrome c oxidase is the component of the respiratory chain that catalyzes the reduction of oxygen to water. Subunits 1-3 form the functional core of the enzyme complex. CO I is the catalytic subunit of the enzyme. Electrons originating in cytochrome c are transferred via the copper A center of subunit 2 and heme A of subunit 1 to the bimetallic center formed by heme A3 and copper B.
Research Articles on COX1	**1.** The monomeric COX1 assembly intermediate accumulates demonstrating a function of COX5A in complex IV biogenesis. A potential therapeutic lead is demonstrated by showing that copper supplementation leads to partial rescue of complex IV deficiency in patient fibroblasts.
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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