COX5B Antibody – Mouse Monoclonal

PRODUCT OVERVIEW

Product Name	COX5B, Monoclonal Antibody
Full Product Name	COX5B (Cytochrome C Oxidase Subunit 5B, Cytochrome C Oxidase Polypeptide VB Mitochondrial, Cytochrome C Oxidase Subunit Vb, COXVB) (MaxLight 490)
Product Gene Name	anti-COX5B antibody
Clonality	Monoclonal
Isotype	IgG1,k
Clone Number	1E8
Host	Mouse
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with MaxLight490.
Purity/Purification	Purified by Protein A Affinity Chromatography.
Specificity	Recognizes human COX5B.
Preparation and Storage	Store product at 4 degree C in the dark. DO NOT FREEZE! Stable at 4 degree C for 12 months after receipt as an undiluted liquid. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Caution: MaxLight490 conjugates are sensitive to light. For maximum recovery of product, centrifuge the original vial prior to removing the cap.
Molecular Weight	13 kDa (121aa), confirmed by MALDI-TOF (Molecular size on SDS-PAGE will appear higher)
OMIM	123866
3D Structure	ModBase 3D Structure for P10606
Immunogen	Partial recombinant corresponding to aa37-128 from human COX5B (NP_001853) with GST tag. MW of the GST tag alone is 26kD.
Immunogen Sequence	VPTDEEQATGLEREIMLAAKKGLDPYNVLAPKGASGTREDPNLVPSISNKRIVGCICEEDNTSVVWFWLHKGEAQRCPRCGAHYKLVPQQLA
Conjugate	MaxLight490
Product Categories/Family for anti-COX5B antibody	Antibodies; Cytochrome
Applications Tested/Suitable for anti-COX5B antibody	FLISA, Western Blot (WB)
Application Notes for anti-COX5B antibody	Applications are based on unconjugated antibody.

Related Product Information for anti-COX5B antibody	Cytochrome C oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to molecular oxygen and contributes to a proton electrochemical gradient across the inner mitochondrial membrane. The complex consists of 13 mitochondrial- and nuclear-encoded subunits. The mitochondrially-encoded subunits perform the electron transfer and proton pumping activities. The functions of the nuclear-encoded subunits are unknown but they may play a role in the regulation and assembly of the complex. This gene encodes the nuclear-encoded subunit Vb of the human mitochondrial respiratory chain enzyme.
Other Notes	Small volumes of anti-COX5B antibody 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 COX5B purchase	MBS6200259 is an antibody targeting COX5B. Also known as COX5B (Cytochrome C Oxidase Subunit 5B, Cytochrome C Oxidase Polypeptide VB Mitochondrial, Cytochrome C Oxidase Subunit Vb, COXVB) (MaxLight 490). Reactive in Human. Host: Mouse.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for COX5B. It may not necessarily be applicable to this product.

NCBI GI #	17017988
NCBI GeneID	1329
NCBI Accession #	NP_001853
UniProt Primary Accession #	P10606
UniProt Secondary Accession #	Q53YB7; Q96J18; Q99610
UniProt Related Accession #	P10606
GenBank Nucleotide #	NM_001862
NCBI Official Full Name	cytochrome c oxidase subunit 5B, mitochondrial
NCBI Official Synonym Full Names	cytochrome c oxidase subunit 5B
NCBI Official Symbol	COX5B
NCBI Official Synonym Symbols	COXVB
UniProt Protein Name	Cytochrome c oxidase subunit 5B, mitochondrial
UniProt Synonym Protein Names	Cytochrome c oxidase polypeptide Vb
Protein Family	Cytochrome c oxidase polypeptide
UniProt Gene Name	COX5B
UniProt Entry Name	COX5B_HUMAN
NCBI Protein Information	cytochrome c oxidase subunit 5B, mitochondrial
UniProt Comments for COX5B	COX5B: This protein is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport. Belongs to the cytochrome c oxidase subunit 5B family. Protein type: Energy Metabolism - oxidative phosphorylation; EC 1.9.3.1; Oxidoreductase; Mitochondrial Chromosomal Location of Human Ortholog: 2q11.2 Cellular Component: mitochondrion; mitochondrial inner membrane Molecular Function: cytochrome-c oxidase activity; metal ion binding Biological Process: cellular metabolic process; respiratory gaseous exchange; transmembrane transport
Research Articles on COX5B	**1.** silence of COX5B leads to metabolic disorders, such as increased glucose uptake and decreased lactate secretion

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