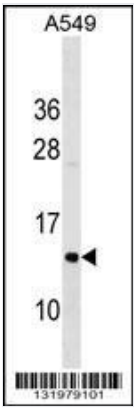
COX5B Antibody – Rabbit Polyclonal

PRODUCT OVERVIEW

Product Name	COX5B, Polyclonal Antibody
Full Product Name	COX5B, ID (COX5B, Cytochrome c oxidase subunit 5B, mitochondrial, Cytochrome c oxidase polypeptide Vb) (Azide free) (HRP)
Product Gene Name	anti-COX5B antibody
Product Synonym Names	COX5B; Cytochrome c oxidase subunit 5B, mitochondrial; Cytochrome c oxidase polypeptide Vb
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with Horseradish Peroxidase (HRP).
Purity/Purification	Purified by Protein A Affinity Chromatography.
Preparation and Storage	Store product at 4 degree C if to be used immediately within two weeks. For long-term storage, aliquot to avoid repeated freezing and thawing and store at -20 degree C. Aliquots are stable at -20 degree C for 12 months after receipt. Dilute required amount only prior to immediate use. Further dilutions can be made in assay buffer. Note: Sodium azide is a potent inhibitor of peroxidase and should not be added to HRP conjugates. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.
Molecular Weight	13,696 Da
OMIM	123866
3D Structure	ModBase 3D Structure for P10606
Immunogen	COX5B antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 20-49 amino acids from the Central region of human COX5B.
Conjugate	HRP
Note	Preservative Free
Product Categories/Family for anti-COX5B antibody	Antibodies; Enzymes; Cytochrome
Applications Tested/Suitable for anti-COX5B antibody	Western Blot (WB), ELISA (EIA)
Application Notes for anti-COX5B antibody	WB: 1:100-500 ELISA: 1:1,000 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.

Product References and Citations for anti-COX5B antibody	Yoshida, T., et al. Int. J. Mol. Med. 25(4):649-656(2010). Chen, Z.X., et al. Cell Death Differ. 17(3):408-420(2010). Oguri, M., et al. Am. J. Hypertens. 23(1):70-77(2010). Beauchemin, A.M., et al. Brain Res. Bull. 56 (3-4), 285-297 (2001): Wu, H., et al. J. Biol. Chem. 275(42):32491-32498(2000).
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	MBS6288102 is an antibody targeting COX5B. Also known as COX5B, ID (COX5B, Cytochrome c oxidase subunit 5B, mitochondrial, Cytochrome c oxidase polypeptide Vb) (Azide free) (HRP). Reactive in Human. Host: Rabbit.



Western Blot (WB) of anti-COX5B antibody
COX5B Antibody (Center) western blot analysis in A549 cell line lysates (35ug/lane).This demonstrates the COX5B antibody detected the COX5B protein (arrow).

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_001853.2
UniProt Primary Accession #	P10606
UniProt Secondary Accession #	Q53YB7; Q96J18; Q99610
UniProt Related Accession #	P10606
GenBank Nucleotide #	NM_001862.2
NCBI Official Full Name	cytochrome c oxidase subunit 5B, mitochondrial
NCBI Official Synonym Full Names	cytochrome c oxidase subunit Vb
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; cytochrome c oxidase polypeptide VB, mitochondrial

NCBI Summary for COX5B	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. [provided by RefSeq, Jul 2008]
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.** Transfected the A549 cells with COX Vb small interfering or shRNA and observed a significant reduction of their COX activity, oxygen consumption, ATP and ability to grow in soft agar and as poorly differentiated tumors in athymic mice.
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