

COX6B2 Polyclonal Antibody
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP55377**Specification****COX6B2 Polyclonal Antibody - Product Information**

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q6YFQ2
Reactivity	Rat, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	11 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human COX6B2
Epitope Specificity	1-88/88
Purity affinity purified by Protein A	
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Mitochondrion intermembrane space.
SIMILARITY	Belongs to the cytochrome c oxidase subunit 6B family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

The cytochrome c oxidase (COX) family of proteins function as the final electron donor in the respiratory chain to drive a proton gradient across the inner mitochondrial membrane, ultimately resulting in the production of water. The mammalian COX apoenzyme is a dimer, with each monomer consisting of 13 subunits, some of which are mitochondrial and some of which are nuclear. Localized to the intermembrane space, COX6b2 (Cytochrome c oxidase subunit 6B2), also known as Cytochrome c oxidase subunit VIb isoform 2 and Cancer/testis antigen 59, is a 88 amino acid mitochondrial protein that is responsible for joining the two COX monomers to form the COX dimer. COX6b2 is specifically expressed in testis and is found to be upregulated in certain cancer cell lines.

COX6B2 Polyclonal Antibody - Additional Information**Gene ID** 125965**Other Names**

Cytochrome c oxidase subunit 6B2, Cancer/testis antigen 59, CT59, Cytochrome c oxidase subunit VIb isoform 2, COX VIb-2, Cytochrome c oxidase subunit VIb, testis-specific isoform, COX6B2

Target/Specificity

Testis specific. Weak expression in thymus and heart. Expressed in cancer cell lines.

Dilution

IHC-P~~N/A<br \>IHC-F~~N/A<br \>IF~~1:50~200<br \>ICC~~N/A<br \>E~~N/A

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

COX6B2 Polyclonal Antibody - Protein Information**Name** COX6B2**Function**

Component of the cytochrome c oxidase, the last enzyme in the mitochondrial electron transport chain which drives oxidative phosphorylation. The respiratory chain contains 3 multisubunit complexes succinate dehydrogenase (complex II, CII), ubiquinol- cytochrome c oxidoreductase (cytochrome b-c1 complex, complex III, CIII) and cytochrome c oxidase (complex IV, CIV), that cooperate to transfer electrons derived from NADH and succinate to molecular oxygen, creating an electrochemical gradient over the inner membrane that drives transmembrane transport and the ATP synthase. Cytochrome c oxidase is the component of the respiratory chain that catalyzes the reduction of oxygen to water. Electrons originating from reduced cytochrome c in the intermembrane space (IMS) are transferred via the dinuclear copper A center (CU(A)) of subunit 2 and heme A of subunit 1 to the active site in subunit 1, a binuclear center (BNC) formed by heme A3 and copper B (CU(B)). The BNC reduces molecular oxygen to 2 water molecules using 4 electrons from cytochrome c in the IMS and 4 protons from the mitochondrial matrix.

Cellular Location

Mitochondrion inner membrane {ECO:0000250|UniProtKB:P00429}; Peripheral membrane protein {ECO:0000250|UniProtKB:P00429}; Intermembrane side {ECO:0000250|UniProtKB:P00429}

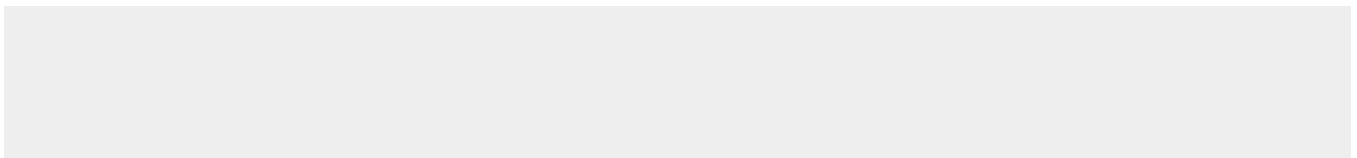
Tissue Location

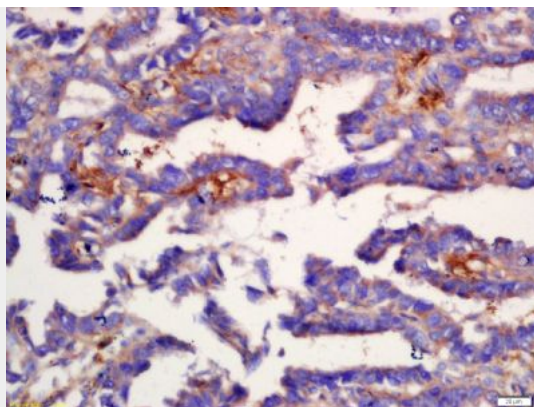
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COX6B2 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

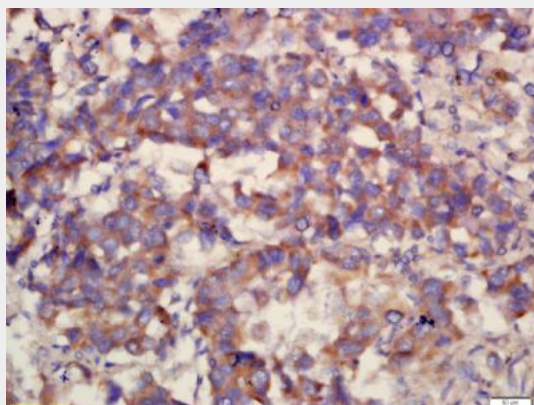
COX6B2 Polyclonal Antibody - Images



Tissue/cell: Human lung cancer tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-COX6B2 Polyclonal Antibody, Unconjugated(bs-14009R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-COX6B2 Polyclonal Antibody, Unconjugated(bs-14009R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining