

Rabbit COX5A Polyclonal Antibody | anti-COX5A antibody

COX5A Antibody (Center)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA286234	Rabbit	Human (Predicted Reactivity: Bovine, Mouse, Rat)	Flow Cytometry, Functional Assay, Immunohistochemistry, ELISA, Western Blot

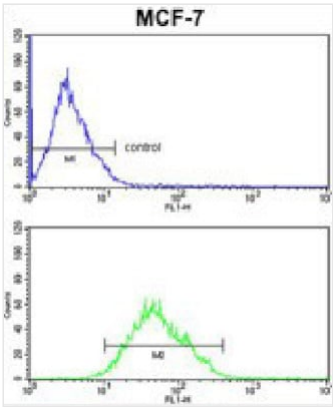
PRODUCT SYNONYMS

COX5A; Polyclonal Antibody; COX5A Antibody (Center); Cytochrome c oxidase subunit 5A; mitochondrial; Cytochrome c oxidase polypeptide Va; anti-COX5A antibody

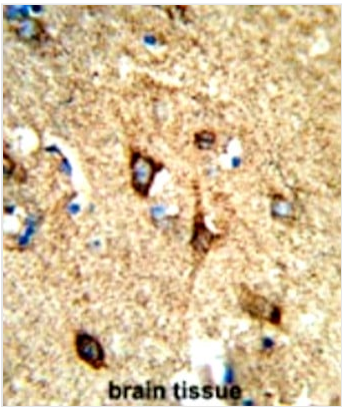
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human (Predicted Reactivity: Bovine, Mouse, Rat)
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This COX5A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 46-73 amino acids from the Central region of human COX5A.
Purity/Purification	This antibody is purified through a protein A column, followed by peptide affinity purification.
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide
Sequence Positions	46-73
Sequence Length	150
Applicable Applications for anti-COX5A antibody	FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), ELISA, WB (Western Blot)
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; Peripheral membrane protein; Matrix side
Preparation and Storage	Maintain refrigerated at 2-8 degree C for up to 6 months. For long term storage store at -20 degree C in small aliquots to prevent freeze-thaw cycles.

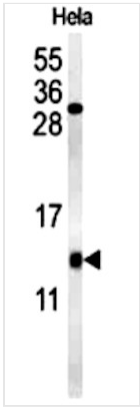
IMAGES



FCM/FACS (Flow Cytometry)
COX5A Antibody (Center) FC analysis of MCF-7cells (bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis



IHC (Immunohiostchemistry)
Formalin-fixed and paraffin-embedded human brain tissue reacted with COX5A Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated



WB (Western Blot)
Western blot analysis of COX5A Antibody (Center) in HeLa cell line lysates (35ug/lane). COX5A (arrow) was detected using the purified Pab

ADDITIONAL INFORMATION

Related Product Information for anti-COX5A antibody	This is the heme A-containing chain of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport.
Product Categories/Family for anti-COX5A antibody	Metabolism
References	Colinge J., et.al., Submitted (OCT-2008) to UniProtKB.

NCBI AND UNIPROT INFORMATION

NCBI GI #	190885499
NCBI GeneID	9377
NCBI Accession #	NP_004246.2
NCBI GenBank Nucleotide #	NM_004255.3
UniProt Accession #	P20674; P30045; Q8TB65
Molecular Weight	16762
NCBI Official Full Name	cytochrome c oxidase subunit 5A, mitochondrial

NCBI Official Synonym Full Names	cytochrome c oxidase subunit Va
NCBI Official Symbol	COX5A
NCBI Official Synonym Symbols	VA; COX; COX-VA
NCBI Protein Information	cytochrome c oxidase subunit 5A, mitochondrial
UniProt Protein Name	Cytochrome c oxidase subunit 5A, mitochondrial
UniProt Gene Name	COX5A
UniProt Entry Name	COX5A_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/cox5a-antibody-flow-cytometry-immunohistochemistry-western-blot-elisa/286234>