

Rabbit anti-Mouse, Rat COX8A Polyclonal Antibody | anti-Cox8a antibody

Anti-COX8A Antibody

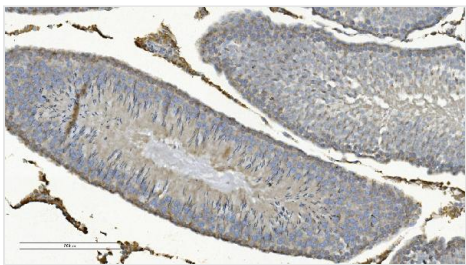
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125818	Rabbit	Mouse, Rat	Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

COX8A; Polyclonal Antibody; Anti-COX8A Antibody; Cox8a; Cox8; Cox8l; Cytochrome c oxidase subunit 8A; mitochondrial; Cytochrome c oxidase polypeptide VIII-liver; Cytochrome c oxidase subunit 8-2; cytochrome c oxidase subunit 8A; anti-Cox8a antibody

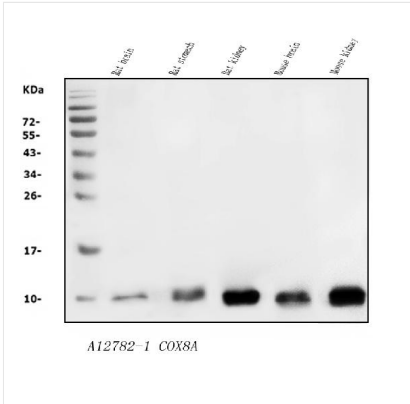
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for COX8A detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Liquid. Each vial contains 500 ug/ml antibody with PBS, 0.02% NaN ₃ and 50% glycerol
Concentration	500 ug/ml (varies by lot)
Applicable Applications for anti-Cox8a antibody	FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthetic peptide corresponding to a sequence of mouse COX8A (AGWILSHLETYRRPE).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year and at 4 degree C for one month. Avoid repeated freezing and thawing.



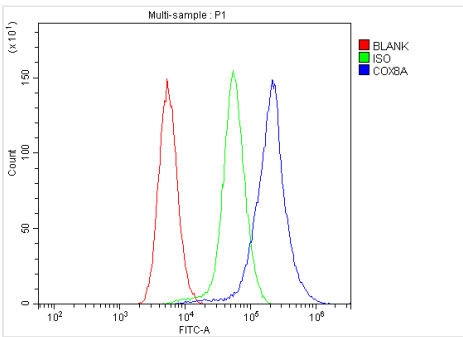
IHC (Immunohistochemistry)

Figure 3. IHC analysis of COX8A using anti-COX8A antibody (AAA125818).COX8A was detected in paraffin-embedded section of rat testis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml rabbit anti-COX8A Antibody (AAA125818) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of COX8A using anti-COX8A antibody (AAA125818).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: rat brain tissue lysatesLane 2: rat stomach tissue lysatesLane 3: rat kidney tissue lysatesLane 4: mouse brain tissue lysatesLane 5: mouse kidney tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with rabbit anti-COX8A antigen affinity purified polyclonal antibody (Catalog # AAA125818) at 0. 5 μg/mL overnight at 4 degree C, then washed with TBS-0. 1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1. 5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for COX8A at approximately 8-10KD. The expected band size for COX8A is at 8-10KD.



FCM/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of mouse spleen tissues using anti-COX8A antibody (AAA125818).Overlay histogram showing mouse spleen tissues stained with AAA125818 (Blue line). The tissues were blocked with 10% normal goat serum. And then incubated with rabbit anti-COX8A Antibody (AAA125818, 1μg/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-rabbit IgG (5-10μg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

ADDITIONAL INFORMATION

Related Product Information for anti-Cox8a antibody

The protein encoded by this gene is the terminal enzyme of the respiratory chain, coupling the transfer of electrons from cytochrome c to molecular oxygen, with the concomitant production of a proton electrochemical gradient across the inner mitochondrial membrane. In addition to 3 mitochondrially encoded subunits, which perform the catalytic function, the eukaryotic enzyme contains nuclear-encoded smaller subunits, ranging in number from 4 in some organisms to 10 in mammals. It has been proposed that nuclear-encoded subunits may be involved in the modulation of the catalytic function. This gene encodes one of the nuclear-encoded subunits.

References	1. Courseaux, A., Grosgeorge, J., Gaudray, P., Pannett, A. A. J., Forbes, S. A., Williamson, C., Bassett, D., Thakker, R. V., Teh, B. T., Farnebo, F., Shepherd, J., Skogseid, B., Larsson, C., Giraud, S., Zhang, C. X., Salandre, J., Calender, A. Definition of the minimal MEN1 candidate area based on a 5-Mb integrated map of proximal 11q13. <i>Genomics</i> 37: 354-365, 1996. 2. Hallmann, K., Kudin, A. P., Zsurka, G., Kornblum, C., Reimann, J., Stuve, B., Waltz, S., Hattingen, E., Thiele, H., Nurnberg, P., Rub, C., Voos, W., Kopatz, J., Neumann, H., Kunz, W. S. Loss of the smallest subunit of cytochrome c oxidase, COX8A, causes Leigh-like syndrome and epilepsy. <i>Brain</i> 139: 338-345, 2016. 3. Richard, C. W., Withers, D. A., Meeker, T. C., Myers, R. M. A radiation hybrid map of the proximal long arm of human chromosome 11 containing the MEN-1 and bcl-1 disease locus. (Abstract) <i>Cytogenet. Cell Genet.</i> 58: 1970 only, 1991.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	6680993
NCBI GeneID	12868
NCBI Accession #	NP_031776.1
NCBI GenBank Nucleotide #	NM_007750.2
UniProt Accession #	Q64445; Q0VBB1; Q545I2
Molecular Weight	7,648 Da
NCBI Official Full Name	cytochrome c oxidase subunit 8A, mitochondrial
NCBI Official Synonym Full Names	cytochrome c oxidase subunit VIIIa
NCBI Official Symbol	Cox8a
NCBI Official Synonym Symbols	COX8L
NCBI Protein Information	cytochrome c oxidase subunit 8A, mitochondrial; COX VIII-L; cytochrome c oxidase subunit 8-2; cytochrome c oxidase polypeptide VIII-liver
UniProt Protein Name	Cytochrome c oxidase subunit 8A, mitochondrial
UniProt Gene Name	Cox8a
UniProt Synonym Gene Names	Cox8; Cox8l
UniProt Entry Name	COX8A_MOUSE

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.