Datasheet for ABIN2782122

anti-COX10 antibody (Middle Region)

3 Images

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Overview

Quantity:	100 µL
Target:	COX10
Binding Specificity:	Middle Region
Reactivity:	Human, Mouse, Rat, Rabbit, Cow, Guinea Pig, Horse, Zebrafish (Danio rerio), Dog
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This COX10 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Immunogen:	The immunogen is a synthetic peptide directed towards the middle region of human COX10
Sequence:	APGPFDWPCF LLTSVGTGLA SCAANSINQF FEVPFDSNMN RTKNRPLVRG
Predicted Reactivity:	Cow: 100%, Dog: 100%, Guinea Pig: 100%, Horse: 100%, Human: 100%, Mouse: 100%, Rabbit: 100%, Rat: 100%, Zebrafish: 93%
Characteristics:	This is a rabbit polyclonal antibody against COX10. It was validated on Western Blot using a cell lysate as a positive control.
Purification:	Affinity Purified

Target Details

Target:	COX10

Target Details

Alternative Name:	COX10 (COX10 Products)
Background:	Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. COX10 is heme A: farnesyltransferase, which is not a structural subunit but required for the expression of functional COX and functions in the maturation of the heme A prosthetic group of COX. This protein is predicted to contain 7-9 transmembrane domains localized in the mitochondrial inner membrane. A gene mutation, which results in the substitution of a lysine for an asparagine (N204K), is identified to be responsible for cytochrome c oxidase deficiency. In addition, this gene is disrupted in patients with CMT1A (Charcot-Marie-Tooth type 1A) duplication and with HNPP (hereditary neuropathy with liability to pressure palsies) deletion.Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. This component is a heteromeric complex consisting of 3 catalytic subunits encoded by mitochondrial genes and multiple structural subunits encoded by nuclear genes. The mitochondrially-encoded subunits function in electron transfer, and the nuclear-encoded subunits may function in the regulation and assembly of the complex. This nuclear gene encodes heme A:farnesyltransferase, which is not a structural subunit but required for the expression of functional COX and functions in the maturation of the heme A prosthetic group of COX. This protein is predicted to contain 7-9 transmembrane domains localized in the mitochondrial inner membrane. A gene mutation, which results in the substitution of a lysine for an asparagine (N204K), is identified to be responsible for cytochrome c oxidase deficiency. In addition, this gene is disrupted in patients with CMT1A (Charcot-Marie-Tooth type 1A) duplication and with HNPP (hereditary neuropathy with liability to pressure palsies) deletion. Publication Note: This RefSeq record includes a subset of the publications that are available for this gene. Please see the Entrez Gene record to access additional publications. Alias Symbols: - Protein Size: 443
Molecular Weight:	49 kDa
Gene ID:	1352
NCBI Accession:	NM_001303, NP_001294
UniProt:	Q12887

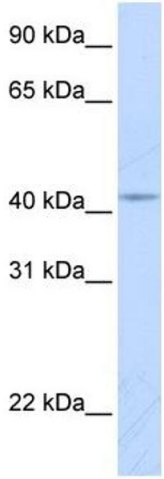
Application Details

Application Notes:	Optimal working dilutions should be determined experimentally by the investigator.
Comment:	Antigen size: 443 AA
Restrictions:	For Research Use only

Handling

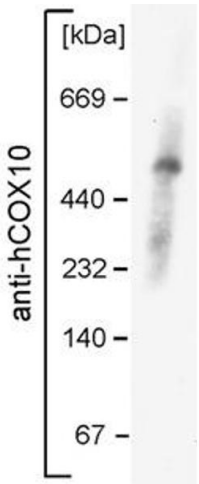
Format:	Liquid
Concentration:	Lot specific
Buffer:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09 % (w/v) sodium azide and 2 % sucrose.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-20 °C
Storage Comment:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.

Images



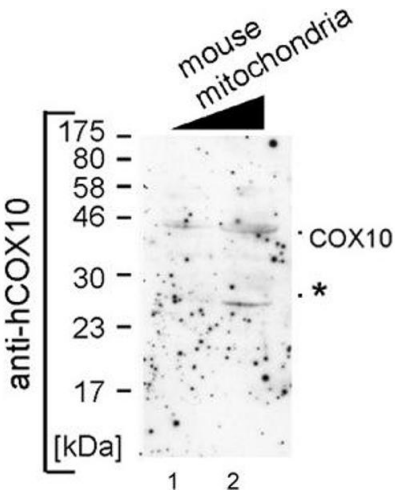
Western Blotting

Image 1. WB Suggested Anti-COX10 Antibody Titration: 0.2-1 ug/ml ELISA Titer: 1:312500 Positive Control: Human Lung



Western Blotting

Image 2. COX10 antibody - middle region validated by WB using mouse mitochondria at 1:1000.



Western Blotting

Image 3. COX10 antibody - middle region validated by WB using mouse mitochondria at 1:1000.