

Datasheet for ABIN7603038
anti-COX4I2 antibody (Middle Region)



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Overview

Quantity:	100 µg
Target:	COX4I2
Binding Specificity:	Middle Region
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This COX4I2 antibody is un-conjugated
Application:	Western Blotting (WB)

Product Details

Purpose:	Anti-COX4I2 Antibody Picoband®
Immunogen:	A synthetic peptide corresponding to a sequence in the middle region of human COX4I2, which shares 88.2% and 82.4% amino acid (aa) sequence identity with mouse and rat COX4I2, respectively.
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins
Characteristics:	Anti-COX4I2 Antibody Picoband® (ABIN7603038). Tested in WB applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

Product Details

Purification: Immunogen affinity purified.

Target Details

Target: COX4I2

Alternative Name: COX4I2 ([COX4I2 Products](#))

Background: Synonyms: Protein NDRG3, N-myc downstream-regulated gene 3 protein, NDRG3, Tissue Specificity: Ubiquitous. Highly expressed in brain. .
Background: Cytochrome c oxidase subunit 4 isoform 2, mitochondrial is an enzyme that in humans is encoded by the COX4I2 gene. Cytochrome c oxidase (COX), the terminal enzyme of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. It 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 be involved in the regulation and assembly of the complex. This nuclear gene encodes isoform 2 of subunit IV. Isoform 1 of subunit IV is encoded by a different gene, however, the two genes show a similar structural organization. Subunit IV is the largest nuclear encoded subunit which plays a pivotal role in COX regulation.

Molecular Weight: 20 kDa

Gene ID: 84701

Pathways: [Proton Transport](#)

Application Details

Application Notes: Western blot, 0.25-0.5 µg/mL, Human
1. Aras, S., Pak, O., Sommer, N., Finley Jr., R., Huttemann, M., Weissmann, N., Grossman, L. I. Oxygen-dependent expression of cytochrome c oxidase subunit 4-2 gene expression is mediated by transcription factors RBPJ, CXXC5, and CHCHD2. Nucleic Acids Res. 41: 2255-2266, 2013. 2. Huttemann, M., Kadenbach, B., Grossman, L. I. Mammalian subunit IV isoforms of cytochrome c oxidase. Gene 267: 111-123, 2001. 3. Shteyer, E., Saada, A., Shaag, A., Al-Hijawi, F. A., Kidess, R., Revel-Vilk, S., Elpeleg, O. Exocrine pancreatic insufficiency, dyserythropoietic (sic) anemia, and calvarial hyperostosis are caused by a mutation in the COX4I2 gene. Am. J. Hum. Genet. 84: 412-417, 2009.

Restrictions: For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Adding 0.2 mL of distilled water will yield a concentration of 500 µg/mL.
Concentration:	500 µg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage:	4 °C, -20 °C
Storage Comment:	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.