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Datasheet

COX4I2 monoclonal antibody (M01), clone 1F2

Catalog Number: H00084701-M01

Regulatory Status: For research use only (RUO)

Product Description: Mouse monoclonal antibody raised against a partial recombinant COX4I2.

Clone Name: 1F2

Immunogen: COX4I2 (NP_115998, 21 a.a. ~ 104 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

Sequence:
MHSSEGTTRGGGKMSPYTNCYAQRYYPMPEEPFCTE
LNAEEQALKEKEKGSWTQLTHAEKVALYRLQFNETFA
EMNRRSNEWKT

Host: Mouse

Reactivity: Human

Applications: ELISA, IHC-P, IP, S-ELISA, WB-Re
(See our web site product page for detailed applications information)

Protocols: See our web site at http://www.abnova.com/support/protocols.asp or product page for detailed protocols

Isotype: IgG2a Kappa

Storage Buffer: In 1x PBS, pH 7.4

Storage Instruction: Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Entrez GeneID: 84701

Gene Symbol: COX4I2

Gene Alias: COX4, COX4-2, COX4B, COX4L2, COXIV-2, dJ857M17.2

Gene Summary: 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. [provided by RefSeq]

References:

1. Oxygen-dependent expression of cytochrome c oxidase subunit 4-2 gene expression is mediated by transcription factors RBPJ, CXXC5 and CHCHD2. Aras S, Pak O, Sommer N, Finley R Jr, Huttemann M, Weissmann N, Grossman LI. Nucleic Acids Res. 2013 Jan 8.

2. Cytochrome c oxidase subunit 4 isoform 2-knockout mice show reduced enzyme activity, airway hyporeactivity, and lung pathology. Huttemann M, Lee I, Gao X, Pecina P, Pecinova A, Liu J, Aras S, Sommer N, Sanderson TH, Tost M, Neff F, Aguilar-Pimentel JA, Becker L, Naton B, Rathkolb B, Rozman J, Favor J, Hans W, Prehn C, Puk O, Schrewe A, Sun M, Hofler H, Adamski J, Bekeredjian R, Graw J, Adler T, Busch DH, Klingenspor M, Klopstock T, Ollert M, Wolf E, Fuchs H, Gailus-Durner V, Hrabe de Angelis M, Weissmann N, Doan JW, Bassett DJ, Grossman LI. FASEB J. 2012 Sep;26(9):3916-30. Epub 2012 Jun 22.

3. Sex- and brain region-specific role of cytochrome c oxidase in 1-methyl-4-phenylpyridinium-mediated astrocyte vulnerability. Sundar Boyalla S, Barbara Victor M, Roemgens A, Beyer C, Arnold S. J Neurosci Res. 2011 Dec;89(12):2068-82. doi: 10.1002/ jnr.22669. Epub 2011 May 19.