

Product Datasheet

COX IV Isoform 2 Antibody (1F2) - Azide and BSA Free H00084701-M01

Unit Size: 0.1 mg

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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H00084701-M01

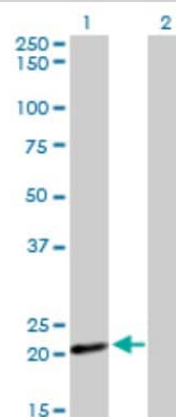
COX IV Isoform 2 Antibody (1F2) - Azide and BSA Free

Product Information	
Unit Size	0.1 mg
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	1F2
Preservative	No Preservative
Isotype	IgG2a Kappa
Purity	IgG purified
Buffer	In 1x PBS, pH 7.4
Product Description	
Host	Mouse
Gene ID	84701
Gene Symbol	COX4I2
Species	Human, Mouse, Rat, Bovine
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 22730437). Please note that this antibody is reactive to Mouse and derived from the same host, Mouse. Mouse-On-Mouse blocking reagent may be needed for IHC and ICC experiments to reduce high background signal. You can find these reagents under catalog numbers PK-2200-NB and MP-2400-NB. Please contact Technical Support if you have any questions.
Specificity/Sensitivity	COX4I2 - cytochrome c oxidase subunit IV isoform 2 (lung)
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. MHSSEGTTRGGGKMSPYTNQYQRYYPMPPEPFCTELNAEEQALKEKEKGS WTQLTHAEKVALYRLQFNETFAEMNRRSNEWKT
Notes	This product is produced by and distributed for Abnova, a company based in Taiwan.
Product Application Details	
Applications	Western Blot, ELISA, Immunoblotting, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation
Recommended Dilutions	Western Blot 1:500, ELISA 1:100-1:2000, Immunohistochemistry 1:10-1:500, Immunoprecipitation 1:10-1:500, Immunohistochemistry-Paraffin 1:10-1:500, Immunoblotting
Application Notes	Antibody reactive against recombinant protein for Western Blot. Has also been used for immunohistochemistry (paraffin) and ELISA.

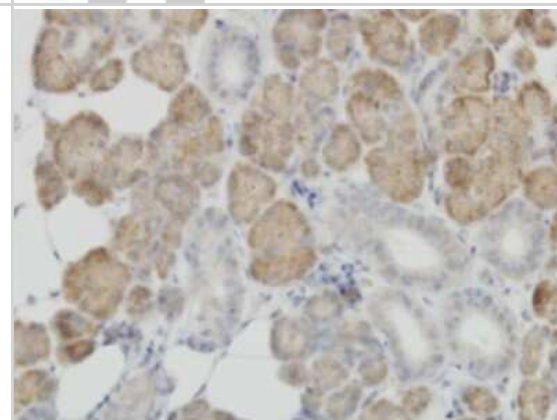


Images

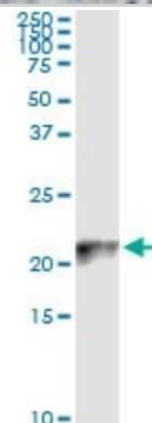
Western Blot: COX IV Isoform 2 Antibody (1F2) [H00084701-M01] - Analysis of COX4I2 expression in transfected 293T cell line by COX4I2 monoclonal antibody (M01), clone 1F2. Lane 1: COX4I2 transfected lysate(20 KDa). Lane 2: Non-transfected lysate.



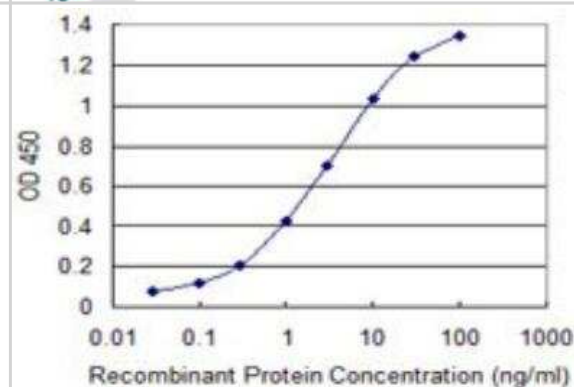
Immunohistochemistry-Paraffin: COX IV Isoform 2 Antibody (1F2) [H00084701-M01] - Analysis of monoclonal antibody to COX4I2 on formalin-fixed paraffin-embedded human salivary gland. Antibody concentration 3 ug/ml.



Immunoprecipitation: COX IV Isoform 2 Antibody (1F2) [H00084701-M01] - Analysis of COX4I2 transfected lysate using anti-COX4I2 monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with COX4I2 MaxPab rabbit polyclonal antibody.



ELISA: COX IV Isoform 2 Antibody (1F2) [H00084701-M01] - Detection limit for recombinant GST tagged COX4I2 is 0.03 ng/ml as a capture antibody.



Publications

Madhu V, Boneski PK, Silagi E et al. Hypoxic Regulation of Mitochondrial Metabolism and Mitophagy in Nucleus Pulposus Cells Is Dependent on HIF-1 α -BNIP3 Axis Journal of Bone and Mineral Research 2020-08-01 [PMID: 32251541] (Western Blot)

Chung YJ, Swietach P, Curtis MK et al. Iron-Deficiency Anemia Results in Transcriptional and Metabolic Remodeling in the Heart Toward a Glycolytic Phenotype Frontiers in Cardiovascular Medicine 2021-01-21 [PMID: 33553263] (In vivo assay)

Pajuelo D, Cunatova K, Vrbacky M et al. Cytochrome c Oxidase Subunit 4 Isoform Exchange Results in Modulation of Oxygen Affinity. Cells. 2020-02-14 [PMID: 32075102]

Liza D, Chaya M, Shmuel R et al. Upregulation of COX4-2 via HIF-1 α in Mitochondrial COX4-1 Deficiency. Cells. 2021-02-20 [PMID: 33672589]

Sun F, Zhuo R, Ma W et al. From clinic to mechanism: Proteomics-based assessment of angiogenesis in adrenal pheochromocytoma J. Cell. Physiol. 2019-05-20 [PMID: 31106414] (Human)

Purandare N, Somayajulu M, Huttemann M et al. The cellular stress proteins CHCHD10 and MNRR1 (CHCHD2): Partners in mitochondrial and nuclear function and dysfunction. J Biol Chem 2018-04-27 [PMID: 29540477] (Human)

Schiffer TA, Peleli M, Sundqvist ML et al. Control of human energy expenditure by cytochrome c oxidase subunit IV-2. Am J Physiol Cell Physiol 2016-09-01 [PMID: 27486093]

Cloonan SM, Glass K, Laucho-Contreras ME et al. Mitochondrial iron chelation ameliorates cigarette smoke-induced bronchitis and emphysema in mice. Nat Med 2016-02-01 [PMID: 26752519]

Sundar Boyalla S, Barbara Victor M, Roemgens A et al. Sex- and brain region-specific role of cytochrome c oxidase in 1-methyl-4-phenylpyridinium-mediated astrocyte vulnerability. J Neurosci Res. 2011-05-09 [PMID: 21598289]

Aras S, Pak O, Sommer N et al. Oxygen-dependent expression of cytochrome c oxidase subunit 4-2 gene expression is mediated by transcription factors RBPJ, CXXC5 and CHCHD2. Nucleic Acids Res. 2013-01-08 [PMID: 23303788]

Huttemann M, Lee I, Gao X et al. Cytochrome c oxidase subunit 4 isoform 2-knockout mice show reduced enzyme activity, airway hyporeactivity, and lung pathology. FASEB J. 2012-09-01 [PMID: 22730437] (WB, Mouse)

Morten KJ, Badger L, Knowles HJ. Differential regulation of HIF-mediated pathways increases mitochondrial metabolism and ATP production in hypoxic osteoclasts. J Pathol. 2013-04-01 [PMID: 23303559] (WB, Human)

More publications at <http://www.novusbio.com/H00084701-M01>





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Products Related to H00084701-M01

HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB720-B	Rabbit anti-Mouse IgG (H+L) Secondary Antibody [Biotin]
NBP1-96981-0.5mg	Mouse IgG2a Kappa Isotype Control (M2AK)
H00084701-P02-10ug	Recombinant Human COX IV Isoform 2 GST (N-Term) Protein

Limitations

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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