

# 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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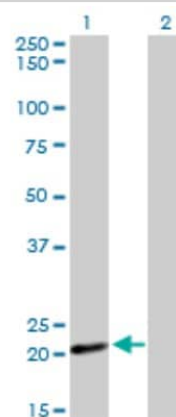


**H00084701-M01****COX IV Isoform 2 Antibody (1F2) - Azide and BSA Free**

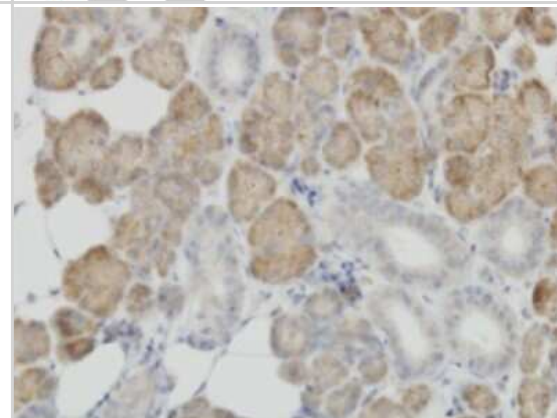
<b>Product Information</b>	
<b>Unit Size</b>	0.1 mg
<b>Concentration</b>	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
<b>Storage</b>	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	1F2
<b>Preservative</b>	No Preservative
<b>Isotype</b>	IgG2a Kappa
<b>Purity</b>	IgG purified
<b>Buffer</b>	In 1x PBS, pH 7.4
<b>Product Description</b>	
<b>Description</b>	Novus Biologicals Mouse COX IV Isoform 2 Antibody (1F2) - Azide and BSA Free (H00084701-M01) is a monoclonal antibody validated for use in IHC, WB, ELISA and IP. Anti-COX IV Isoform 2 Antibody: Cited in 14 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Mouse
<b>Gene ID</b>	84701
<b>Gene Symbol</b>	COX4I2
<b>Species</b>	Human, Mouse, Rat, Bovine
<b>Reactivity Notes</b>	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.
<b>Specificity/Sensitivity</b>	COX4I2 - cytochrome c oxidase subunit IV isoform 2 (lung)
<b>Immunogen</b>	COX4I2 (NP_115998, 21 a.a. ~ 104 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. MHSSEGTTRGGGKMSPYTNCYAQRYYPMPPEEPFCTELNAEEQALKEKEKGS WTQLTHAEKVALYRLQFNETFAEMNRRSNEWKT
<b>Notes</b>	This product is produced by and distributed for Abnova, a company based in Taiwan.
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Immunohistochemistry-Paraffin, ELISA, Immunoblotting, Immunohistochemistry, Immunoprecipitation
<b>Recommended Dilutions</b>	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
<b>Application Notes</b>	Antibody reactive against recombinant protein for Western Blot. Has also been used for immunohistochemistry (paraffin) and ELISA.

## Images

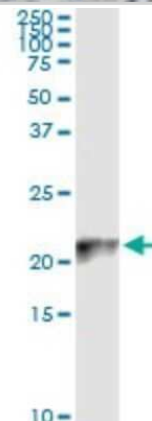
Western Blot: COX IV Isoform 2 Antibody (1F2) [H00084701-M01] - Analysis of COX4I2 expression in transfected 293T cell line by COX4I2 monoclonal antibody (M01), clone 1F2. Lane 1: COX4I2 transfected lysate (20 KDa). Lane 2: Non-transfected lysate.



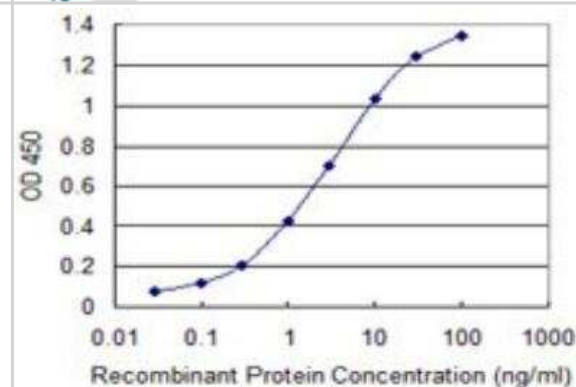
Immunohistochemistry-Paraffin: COX IV Isoform 2 Antibody (1F2) [H00084701-M01] - Analysis of monoclonal antibody to COX4I2 on formalin-fixed paraffin-embedded human salivary gland. Antibody concentration 3 ug/ml.



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?-BNIP3 Axis *Journal of Bone and Mineral Research* 2020-08-01 [PMID: 32251541]
- 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]
- 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? 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, Badder 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**

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NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-96981-0.5mg	Mouse IgG2a Kappa Isotype Control (M2AK)

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### **Limitations**

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