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COX6B1 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant COX6B1.
Catalog # AT1600a

Product Information

Application	WB, IHC
Primary Accession	P14854
Other Accession	NM_001863
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	5D3
Calculated MW	10192

Additional Information

Gene ID	1340
Other Names	Cytochrome c oxidase subunit 6B1, Cytochrome c oxidase subunit VIb isoform 1, COX VIb-1, COX6B1, COX6B
Target/Specificity	COX6B1 (NP_001854, 1 a.a. ~ 86 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	COX6B1 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

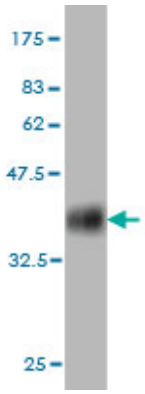
Background

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 subunit VIb. Mutations in this gene are associated with severe infantile encephalomyopathy. Three pseudogenes COX6BP-1, COX6BP-2 and COX6BP-3 have been found on chromosomes 7, 17 and 22q13.1-13.2, respectively.

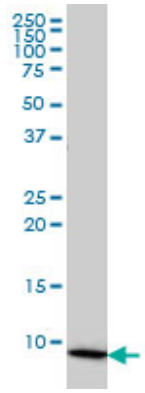
References

Assembly of nuclear DNA-encoded subunits into mitochondrial complex IV, and their preferential integration into supercomplex forms in patient mitochondria. Lazarou M, et al. FEBS J, 2009 Nov. PMID 19843159.Severe infantile encephalomyopathy caused by a mutation in COX6B1, a nucleus-encoded subunit of cytochrome c oxidase. Massa V, et al. Am J Hum Genet, 2008 Jun. PMID 18499082.Toward a confocal subcellular atlas of the human proteome. Barbe L, et al. Mol Cell Proteomics, 2008 Mar. PMID 18029348.Mid-region parathyroid hormone-related protein (PTHrP) and gene expression of MDA-MB231 breast cancer cells. Sirchia R, et al. Biol Chem, 2007 May. PMID 17516841.Large-scale mapping of human protein-protein interactions by mass spectrometry. Ewing RM, et al. Mol Syst Biol, 2007. PMID 17353931.

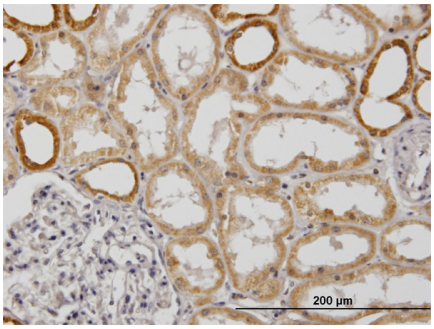
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (35.2 KDa) .



COX6B1 monoclonal antibody (M01), clone 5D3 Western Blot analysis of COX6B1 expression in HL-60 ((Cat # AT1600a)



Immunoperoxidase of monoclonal antibody to COX6B1 on formalin-fixed paraffin-embedded human kidney. [antibody concentration 0.3 ug/ml]