

COX17 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant COX17. Catalog # AT1597a

Specification

COX17 Antibody (monoclonal) (M01) - Product Information

Application WB, IHC, E 014061 **Primary Accession** Other Accession NM 005694 Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG2b Kappa Calculated MW 6915

COX17 Antibody (monoclonal) (M01) - Additional Information

Gene ID 10063

Other Names

Cytochrome c oxidase copper chaperone, COX17

Target/Specificity

COX17 (NP 005685, 1 a.a. ~ 63 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 E~~N/A

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

COX17 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

COX17 Antibody (monoclonal) (M01) - Protocols

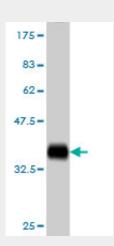
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides

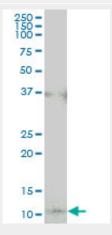


- Dot Blot
- <u>Immunohistochemistry</u>
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

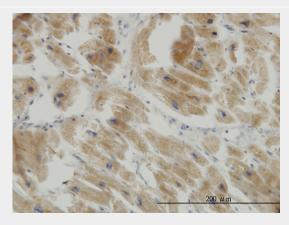
COX17 Antibody (monoclonal) (M01) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (32.67 KDa).

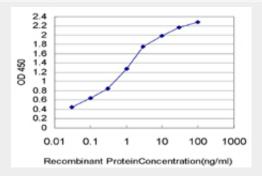


COX17 monoclonal antibody (M01), clone 4G2. Western Blot analysis of COX17 expression in IMR-32.





Immunoperoxidase of monoclonal antibody to COX17 on formalin-fixed paraffin-embedded human heart. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged COX17 is approximately 0.03ng/ml as a capture antibody.

COX17 Antibody (monoclonal) (M01) - Background

Cytochrome c oxidase (COX), the terminal component of the mitochondrial respiratory chain, catalyzes the electron transfer from reduced cytochrome c to oxygen. This component 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 function in the regulation and assembly of the complex. This nuclear gene encodes a protein which is not a structural subunit, but may be involved in the recruitment of copper to mitochondria for incorporation into the COX apoenzyme. This protein shares 92% amino acid sequence identity with mouse and rat Cox17 proteins. This gene is no longer considered to be a candidate gene for COX deficiency. A pseudogene COX17P has been found on chromosome 13.

COX17 Antibody (monoclonal) (M01) - References

1.Dysregulation of intracellular copper homeostasis is common to transgenic mice expressing human mutant superoxide dismutase-1s regardless of their copper-binding abilities. Tokuda E, Okawa E, Watanabe S, Ono SI, Marklund SL. Neurobiol Dis. 2013 Jan 13. doi:pii: S0969-9961(13)00013-2. 10.1016/j.nbd.2013.01.001. [Epub ahead of print]