10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

# COX6C Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant COX6C.
Catalog # AT1602a

## Product Information

| | |
|---|---|
| **Application** | WB, IHC, IF |
| **Primary Accession** | P09669 |
| **Other Accession** | BC000187 |
| **Reactivity** | Human |
| **Host** | mouse |
| **Clonality** | monoclonal |
| **Isotype** | IgG1 kappa |
| **Clone Names** | 4G4-2A8 |
| **Calculated MW** | 8781 |

## Additional Information

| | |
|---|---|
| **Gene ID** | 1345 |
| **Other Names** | Cytochrome c oxidase subunit 6C, Cytochrome c oxidase polypeptide VIc, COX6C |
| **Target/Specificity** | COX6C (AAH00187, 1 a.a. ~ 75 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa. |
| **Dilution** | WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 |
| **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** | COX6C Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures. |

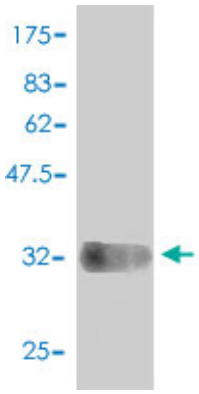
## Background

Cytochrome c oxidase, 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 VIc, which has 77% amino acid sequence identity with mouse subunit VIc. This gene is up-regulated in prostate cancer cells. A pseudogene has been found on chromosomes 16p12.

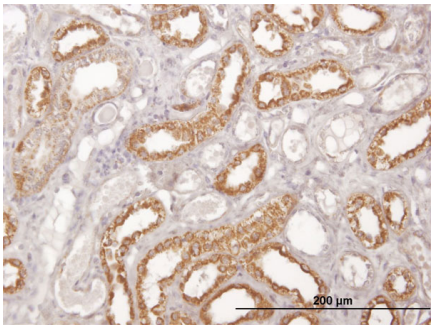
## References

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.Polymorphisms in mitochondrial genes and prostate cancer risk. Wang L, et al. Cancer Epidemiol Biomarkers Prev, 2008 Dec. PMID 19064571.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.A human protein-protein interaction network: a resource for annotating the proteome. Stelzl U, et al. Cell, 2005 Sep 23. PMID 16169070.

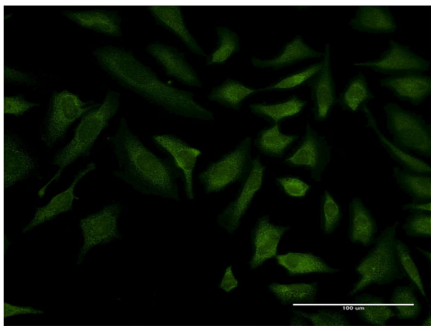
## Images




Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (33.99 KDa) .




Immunoperoxidase of monoclonal antibody to COX6C on formalin-fixed paraffin-embedded human kidney. [antibody concentration 3 ug/ml]



Immunofluorescence of monoclonal antibody to COX6C on HeLa cell . [antibody concentration 10 ug/ml]