



# COX IV Monoclonal Antibody(6C8)

<b>Catalog No</b>	YP-Ab-02374
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Rat;Mouse
<b>Applications</b>	WB;IHC;IF;
<b>Gene Name</b>	COX4I1
<b>Protein Name</b>	Cytochrome c oxidase subunit 4 isoform 1, mitochondrial
<b>Immunogen</b>	Recombinant Protein of Cytochrome c oxidase subunit 4 isoform 1, mitochondrial
<b>Specificity</b>	The antibody detects endogenous COX IV protein.
<b>Formulation</b>	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.
<b>Source</b>	Monoclonal, Mouse
<b>Purification</b>	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
<b>Dilution</b>	WB: 1:1000-3000 IF 1:200 IHC 1:50-300
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	COX4I1; COX4; Cytochrome c oxidase subunit 4 isoform 1, mitochondrial; Cytochrome c oxidase polypeptide IV; Cytochrome c oxidase subunit IV isoform 1; COX IV-1
<b>Observed Band</b>	15kD
<b>Cell Pathway</b>	Mitochondrion inner membrane ; Single-pass membrane protein .
<b>Tissue Specificity</b>	Ubiquitous.
<b>Function</b>	function:This protein is one of the nuclear-coded polypeptide chains of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport.,similarity:Belongs to the cytochrome c oxidase IV family.,tissue specificity:Ubiquitous.,
<b>Background</b>	Cytochrome c oxidase (COX) is the terminal enzyme of the mitochondrial respiratory chain. It is a multi-subunit enzyme complex that couples the transfer of electrons from cytochrome c to molecular oxygen and contributes to a proton electrochemical gradient across the inner mitochondrial membrane. The complex consists of 13 mitochondrial- and nuclear-encoded subunits. The mitochondrially-encoded subunits perform the electron transfer and proton pumping activities. The functions of the nuclear-encoded subunits are unknown but they may play a role in the regulation and assembly of the complex. This gene



encodes the nuclear-encoded subunit IV isoform 1 of the human mitochondrial respiratory chain enzyme. It is located at the 3' of the NOC4 (neighbor of COX4) gene in a head-to-head orientation, and shares a promoter with it. Pseudogenes related to this gene are located on chromosomes

**matters needing attention**

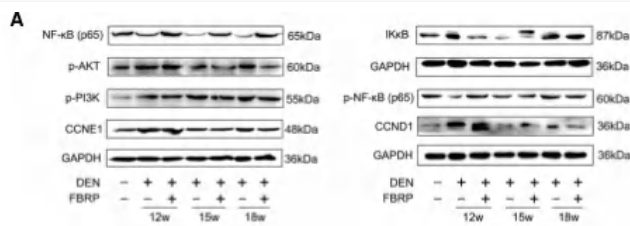
Avoid repeated freezing and thawing!

**Usage suggestions**

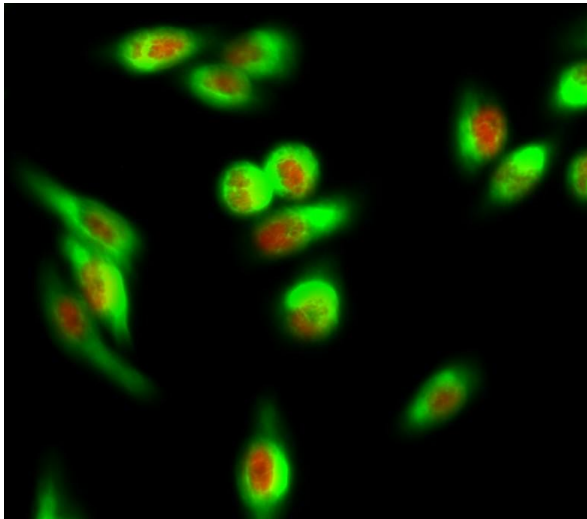
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



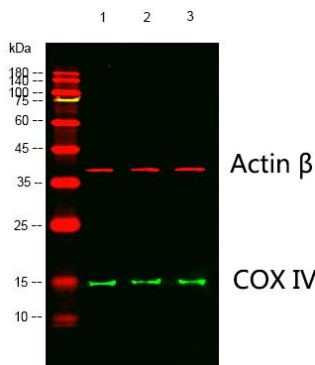
## Products Images



Zhang, Yanqiong, et al. "A discovery of clinically approved formula FBRP for repositioning to treat HCC by inhibiting PI3K/AKT/NF-κB activation." *Molecular Therapy-Nucleic Acids*19 (2020): 890-904.



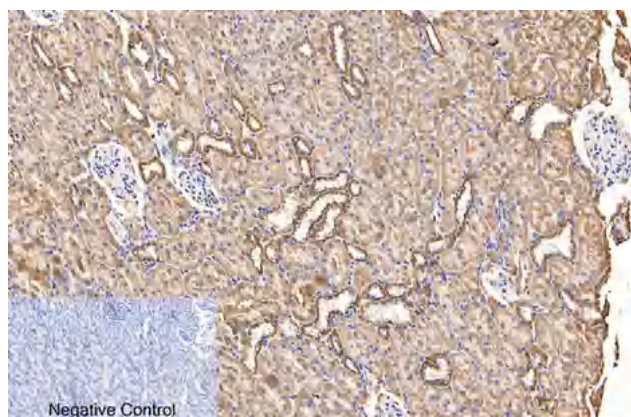
Immunofluorescence analysis of HeLa cell. 1, AF-10 Polyclonal Antibody (red) was diluted at 1:200 (4° overnight). COX IV Monoclonal Antibody (6C8) (green) was diluted at 1:200 (4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000 (room temperature, 50min). Goat Anti Mouse Alexa Fluor 488 Catalog:RS3208 was diluted at 1:1000 (room temperature, 50min).



Western blot analysis of lysates from 1) COS7, 2) 3T3, 3) HeLa cells, (Green) primary antibody was diluted at 1:1000, 4° over night, Dylight 800 secondary antibody (Immunoway:RS23910) was diluted at 1:10000, 37° 1hour. (Red) Actin β Polyclonal Antibody (Immunoway:YT0099) antibody was diluted at 1:5000 as loading control, 4° over night, Dylight 680 secondary antibody (Immunoway:RS23720) was diluted at 1:10000, 37° 1hour.



Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1, COX IV Monoclonal Antibody (6C8) was diluted at 1:200 (4°C overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C, 20min). 3, Secondary antibody was diluted at 1:200 (room temperature, 30min). Negative control was used by secondary antibody only.



Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,COX IV Monoclonal Antibody(6C8) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room temperature, 30min). Negative control was used by secondary antibody only.