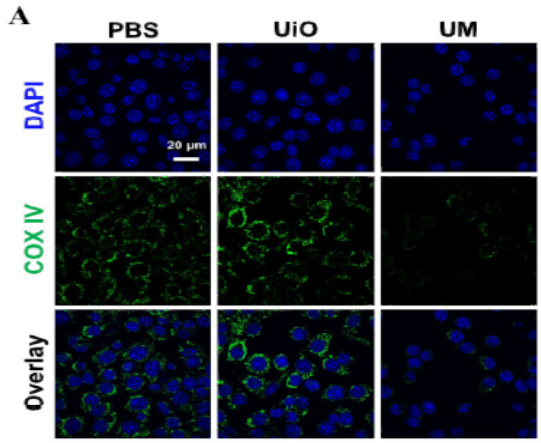
Best Tools for immunology Research

COX IV Monoclonal Antibody(6C8)

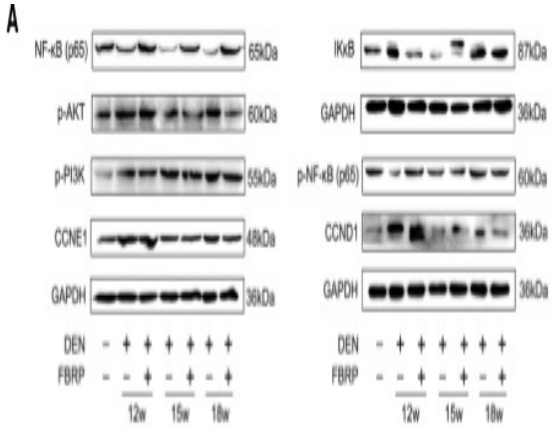
Catalog No :	YM3033
Reactivity :	Human;Rat;Mouse
Applications :	WB;IHC;IF;
Target :	COX IV
Fields :	>>Oxidative phosphorylation;>>Metabolic pathways;>>Cardiac muscle contraction;>>Thermogenesis;>>Non-alcoholic fatty liver disease;>>Alzheimer disease;>>Parkinson disease;>>Amyotrophic lateral sclerosis;>>Huntington disease;>>Prion disease;>>Pathways of neurodegeneration - multiple diseases;>>Chemical carcinogenesis - reactive oxygen species;>>Diabetic cardiomyopathy
Gene Name :	COX4I1
Protein Name :	Cytochrome c oxidase subunit 4 isoform 1, mitochondrial
Human Gene Id :	1327
Human Swiss Prot No :	P13073
Mouse Gene Id :	12857
Mouse Swiss Prot No :	P19783
Rat Gene Id :	29445
Rat Swiss Prot No :	P10888
Immunogen :	Recombinant Protein of Cytochrome c oxidase subunit 4 isoform 1, mitochondrial
Specificity :	The antibody detects endogenous COX IV protein.
Formulation :	PBS, pH 7.4, containing 0.5%BSA, 0.02% sodium azide as Preservative and 50% Glycerol.

Source :	Monoclonal, Mouse
Dilution :	WB 1:1000-3000 IF 1:200 IHC 1:50-300
Purification :	The antibody was affinity-purified from mouse ascites by affinity-chromatography using specific immunogen.
Storage Stability :	-15°C to -25°C/1 year(Do not lower than -25°C)
Observed Band :	15kD
Cell Pathway :	Oxidative phosphorylation;Cardiac muscle contraction;Alzheimer's disease;Parkinson's disease;Huntington's disease;
Background :	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
Function :	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.,
Subcellular Location :	Mitochondrion inner membrane ; Single-pass membrane protein .
Expression :	Ubiquitous.

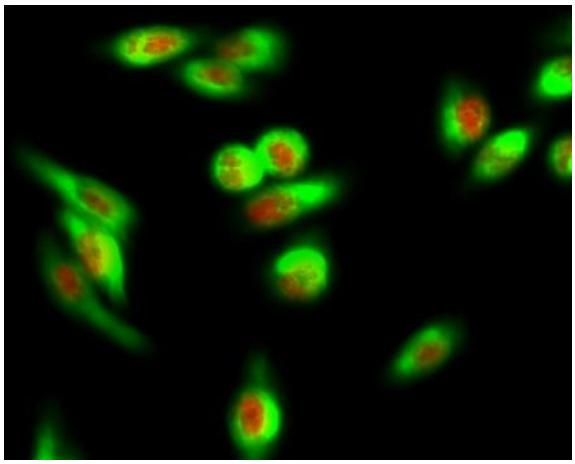
Products Images



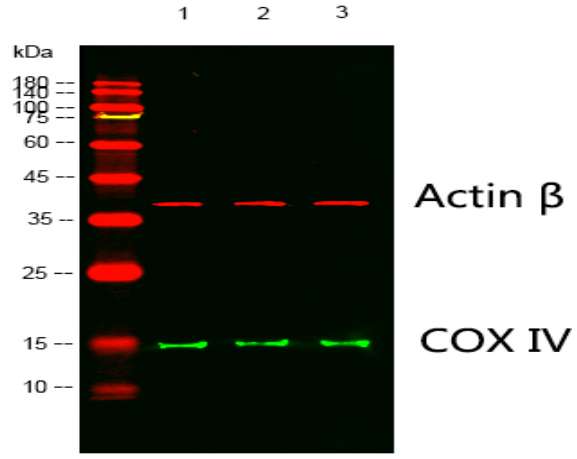
Immunogenic Radiation Therapy for Enhanced Antitumor Immunity via a Core–Shell Nanosensitizer-Mediated Immunosuppressive Tumor Microenvironment Modulation. ACS Nano Jin-Xiang Chen IF Mouse 4T1 cell-xenograft



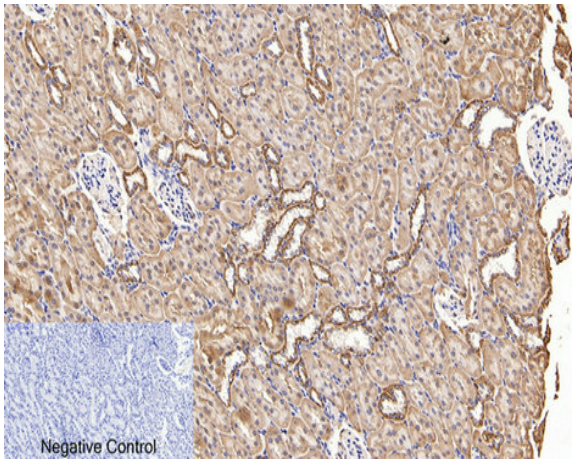
Zhang, Yanqiong, et al. "A discovery of clinically approved formula FBRP for repositioning to treat HCC by inhibiting PI3K/AKT/NF-κB activation." Molecular Therapy-Nucleic Acids19 (2020): 890-904.



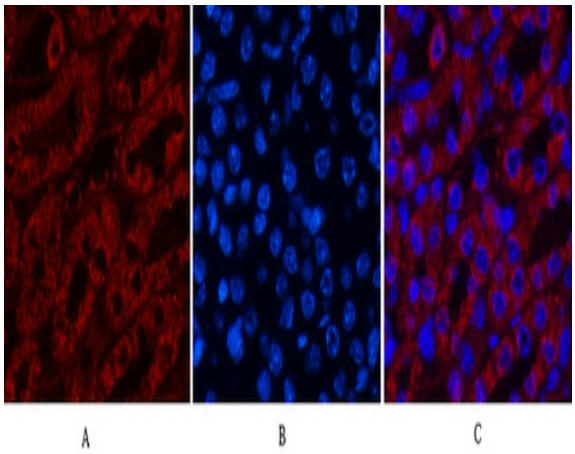
Immunofluorescence analysis of Hela cell. 1,AF-10 Polyclonal Antibody(red) was diluted at 1:200(4° overnight). COX IV Monoclonal Antibody(6C8)(green) was diluted at 1:200(4° overnight). 2, Goat Anti Rabbit Alexa Fluor 594 Catalog:RS3611 was diluted at 1:1000(room temperature, 50min). Goat Anti Mouse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



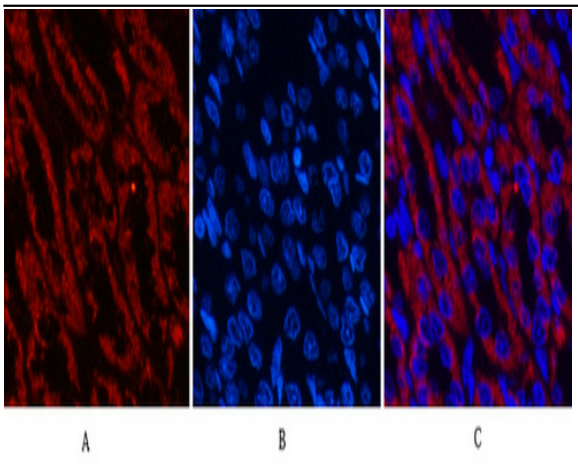
Western blot analysis of lysates from 1) COS7,2) 3T3,3) Hela cells, (Green) primary antibody was diluted at 1:1000, 4°over night, Dylight 800 secondary antibody(Immunoway:RS23910)was diluted at 1:10000, 37° 1hour. (Red) Actin β Polyclonal Antibody (Immunoway:YT0099) antibody was diluted at 1:5000 as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



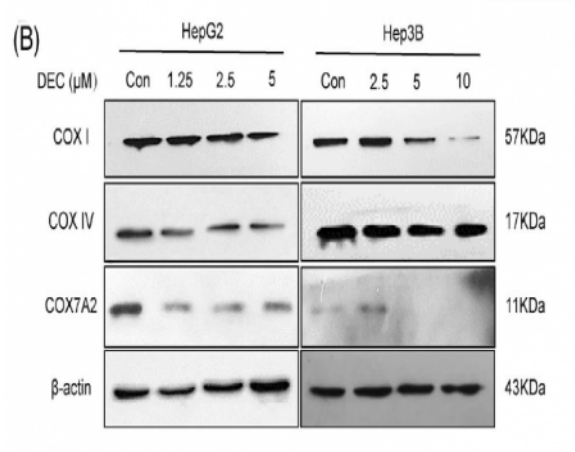
Immunohistochemical analysis of paraffin-embedded Rat-kidney tissue. 1,COX IV Monoclonal Antibody(6C8) was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used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



Immunofluorescence analysis of Mouse-kidney tissue. 1,COX IV Monoclonal Antibody(6C8)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of Rat-kidney tissue. 1,COX IV Monoclonal Antibody(6C8)(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



The nature compound dehydrocrenatidine exerts potent antihepatocellular carcinoma by destroying mitochondrial complexes in vitro and in vivo 2022 Feb 02. WB Human