For Research Use Only

COXIV Monoclonal antibody

Catalog Number:66110-1-lg 29 Publications



Basic Information

Applications

Catalog Number: GenBank Accession Number: 66110-1-lg BC021236 GeneID (NCBI): Size: 2000 μg/ml 1327 **UNIPROT ID:** Source: Mouse P13073 Full Name: Isotype:

cytochrome c oxidase subunit IV isoform 1 Immunogen Catalog Number:

AG20551 Calculated MW: 19.6 kDa Observed MW: 17-18 kDa

Tested Applications:

Cited Applications:

FC, IF/ICC, IHC, WB, ELISA

lgG1

Species Specificity:

human **Cited Species:** human, rat, mouse

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

Purification Method: Protein G purification

CloneNo.: 2A7B2

Recommended Dilutions: WB 1:5000-1:50000 IHC 1:250-1:1000 IF 1:50-1:500

Positive Controls:

WB: A431 cells, HeLa cells, HEK-293 cells, HepG2 cells,

Jurkat cells, LNCaP cells, K-562 cells

IHC: human prostate cancer tissue, human pancreas

tissue, human heart tissue

IF: HepG2 cells,

Background Information

COX4I1, also named as COXI4 and COXIV-1, belongs to the cytochrome coxidase IV family. It is one of the nuclearcoded polypeptide chains of cytochrome c oxidase, the terminal oxidase in mitochondrial electron transport. COX4l 1 is a marker for mitochondria. It has two isoforms (isoform 1 and 2). Isoform 1(COX4l 1) is ubiquitously expressed and isoform 2 is highly expressed in lung tissues. COX411 is commonly used as a loading control. This antibody is specific to COX4l1 and do not cross reacts with COX4l2.

Notable Publications

| Author | Pubmed ID | Journal | Application |
|--------------|-----------|----------------|-------------|
| Zi-Chao Wang | 36163178 | Cell Death Dis | WB |
| Xingfeng Liu | 36131205 | Nat Metab | WB |
| Quanfu Li | 36289190 | Cell Death Dis | WB |

Storage

Store at -20°C. Stable for one year after shipment.

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

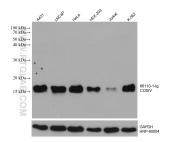
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

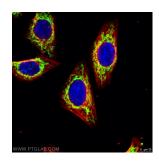
T: 4006900926 E: Proteintech-CN@ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

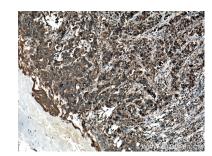
Selected Validation Data



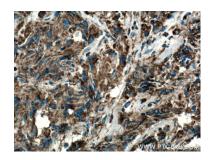
Various lysates were subjected to SDS PAGE followed by western blot with 66110-1-lg (COXIV antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated GAPDH Monoclonal antibody (HRP-60004) as loading



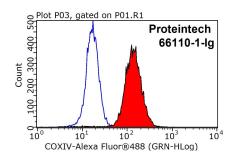
Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using 66110-1-1g (COXIV antibody, 1:100) at dilution of 1:100 and Alexa Fluor 488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L); Red is the staining with alpha Tubulin antibody (11224-1-AP, 1:100).



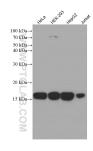
Immunohistochemical analysis of paraffinembedded human prostate cancer tissue slide using 66110-1-1g (COXIV antibody) at dilution of 1:500 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human prostate cancer tissue slide using 66110-1-Ig (COXIV antibody) at dilution of 1:500 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10^6 HeLa cells were stained with 0.2ug COXIV antibody (66110-1-lg, red) and control antibody (blue). Fixed with 90% MeOH blocked with 3% BSA (30 min). Alexa Fluor 488-conjugated AffiniPure Goat Anti-Mouse IgG(H+L) with dilution 1:1000.



Various lysates were subjected to SDS PAGE followed by western blot with 66110-1-1g (COXIV antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.