For Research Use Only

Aconitase 2 Monoclonal antibody

Catalog Number:67509-1-Ig

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
67509-1-Ig

Size:
1600 ug/ml

Source:
Mouse

Isotype:
IgG1

Immunogen Catalog Number:
AG17784

GenBank Accession Number:
BC014092

GeneID (NCBI):
50

UNIPROT ID:
Q99798

Full Name:
aconitase 2, mitochondrial

Calculated MW:
85 kDa

Observed MW:
85 kDa

Purification Method:
Protein G purification

CloneNo.:
1F1G4

Recommended Dilutions:
WB 1:5000-1:50000
IHC 1:500-1:2000

Applications

Tested Applications:
WB, IHC, FC (Intra), ELISA

Species Specificity:
human, mouse, rat, pig

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Positive Controls:

WB : PC-12 cells, pig brain tissue, rat brain tissue, mouse brain tissue, HEK-293 cells, pig cerebellum tissue, rat cerebellum tissue, mouse cerebellum tissue, Neuro-2a cells, rabbit brain tissue

IHC : human liver cancer tissue,

Background Information

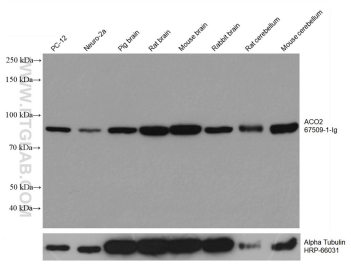
ACO2(aconitate hydratase, mitochondrial) is also named as citrate hydro-lyase and belongs to the aconitase/IPM isomerase family. It plays a key function in cellular energy production, and loss of its activity has a major impact on cellular and organismal survival. Western blot shows two bands of 83 kDa and 40 kDa. The 40 kDa fragment decreases with age and oxidative stress, whereas other fragmentation products with molecular weights between 40 and 83 kDa increased with age and MnSOD(mitochondrial manganese superoxide dismutase) deficiency(PMID:12459471). Defects in ACO2 are the cause of infantile cerebellar-retinal degeneration (ICRD).

Storage

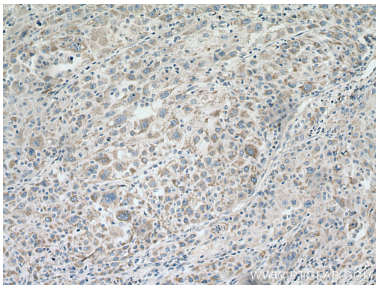
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

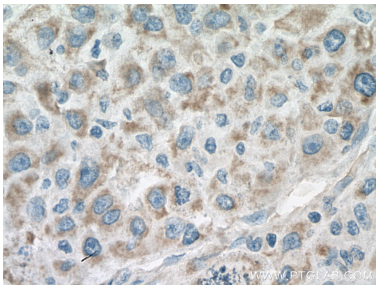
Selected Validation Data



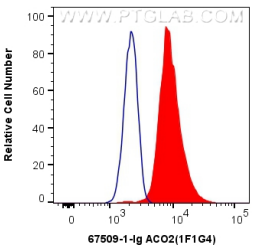
Various lysates were subjected to SDS PAGE followed by western blot with 67509-1-Ig (ACO2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control.



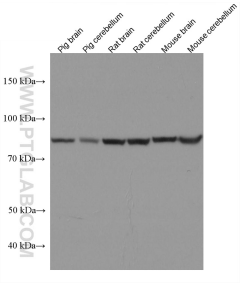
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 67509-1-Ig (ACO2 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



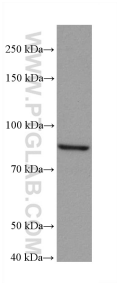
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 67509-1-Ig (ACO2 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1X10^6 HeLa cells were intracellularly stained with 0.4 ug Anti-Human ACO2 (67509-1-Ig, Clone:1F1G4) and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L) at dilution 1:1000 (red), or 0.4 ug Mouse IgG1 Isotype Control (MOPC-21) (65124-1-Ig, Clone: MOPC-21) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Various lysates were subjected to SDS PAGE followed by western blot with 67509-1-Ig (ACO2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



HEK-293 cells were subjected to SDS PAGE followed by western blot with 67509-1-Ig (ACO2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.