For Research Use Only

Aconitase 2 Monoclonal antibody, PBS Only

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Catalog Number: 67509-1-PBS

Basic Information

Catalog Number:

GenBank Accession Number:

Purification Method: Protein G purification

67509-1-PBS

GeneID (NCBI):

BC014092

100ug, Concentration: 1 mg/ml by

CloneNo.: 1F1G4

Nanodrop:

UNIPROT ID: Q99798 Full Name:

Mouse Isotype:

aconitase 2, mitochondrial

lgG1

Calculated MW: 85 kDa

Immunogen Catalog Number: AG17784

Observed MW:

85 kDa

Applications

Tested Applications:

WB, IHC, FC (Intra), Indirect ELISA

Species Specificity:

human, mouse, rat, pig

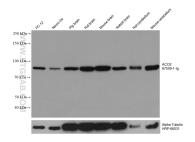
Background Information

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).

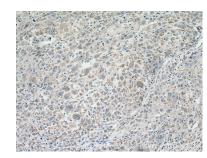
Storage

Store at -80°C. Storage Buffer: PBS Only

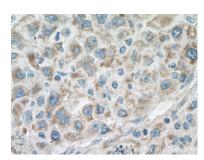
Selected Validation Data



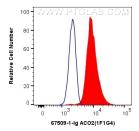
Various lysates were subjected to SDS PAGE followed by western blot with 67509-1-lg (ACO2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. The membrane was stripped and reblotted with HRP-conjugated Alpha Tubulin Monoclonal antibody (HRP-66031) as loading control. This data was developed using the same antibody clone with 67509-1-PBS in a different storage buffer formulation.



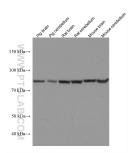
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 67509-1-lg (ACO2 antibody) at dilution of 1:2000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67509-1-PBS in a different storage buffer formulation.



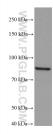
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 67509-1-Ig (ACO2 antibody) at dilution of 1:2000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 67509-1-PBS in a different storage buffer formulation.



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). This data was developed using the same antibody clone with 67509-1-



Various lysates were subjected to SDS PAGE followed by western blot with 67509-1-1g (ACO2 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 67509-1-PBS in a different storage buffer formulation.



HEK-293 cells were subjected to SDS PAGE followed by western blot with 67509-1-1g (ACO2 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 67509-1-PBS in a different storage buffer formulation.