For Research Use Only

ECHS1 Monoclonal antibody

Catalog Number:66117-1-lg Featured Product

4 Publications

BC008906

1892

P30084

GeneID (NCBI):

UNIPROT ID:

Full Name:

GenBank Accession Number:

enoyl Coenzyme A hydratase, short

chain, 1, mitochondrial

Calculated MW:



Basic Information

Catalog Number: 66117-1-lg Size: 1207 µg/ml

Source: Mouse Isotype: lgG2b

Immunogen Catalog Number:

AG16775

31 kDa

Observed MW: 31 kDa

Purification Method:

Protein A purification

CloneNo.: 2B9D5

Recommended Dilutions:

WB 1:2000-1:20000

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate IHC 1:50-1:1000 IF 1:400-1:1600

Applications

Tested Applications: IF/ICC, IHC, IP, WB, ELISA

Cited Applications: WB, IP, IF

human Cited Species:

Species Specificity:

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: HeLa cells, HepG2 cells, human testis tissue, PC-3 cells, HEK-293 cells, LO2 cells, COLO 320 cells, T47D

IP: HepG2 cells,

IHC: human prostate cancer tissue, human liver tissue

IF: HeLa cells,

Background Information

Enoyl-coenzyme A hydratase (ECHS1) is a mitochondrial protein which catalyzes the hydration of 2-trans-enoylcoenzyme A intermediates to L-3-hydroxyacyl-coenzyme A, playing key role in metabolism of fatty acids in mitochondria. ECHS1 is highly expressed in muscle, liver and fibroblasts. Altered expression of ECHS1 has been considered as a characteristic feature of mitochondria dysfunction. (23275097, 23235493)

Notable Publications

| Author | Pubmed ID | Journal | Application |
|----------------|-----------|------------------------|-------------|
| Wei-Dong Xu | 25281561 | J Proteomics | WB |
| Rui Li | 34615856 | Cell Death Dis | WB,IF,IP |
| Tobias B Haack | 26000322 | Ann Clin Transl Neurol | WB |

Storage

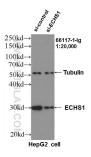
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

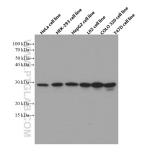
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



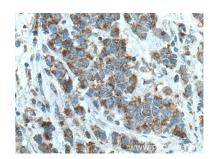
WB result of ECHS1 antibody (66117-1-lg, 1:20,000) with si-Control and si-ECHS1 transfected HepG2 cells.



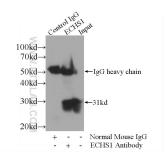
Various cells were subjected to SDS PAGE followed by western blot with 66117-1-1g (ECHS1 antibody) at dilution of 1:20000 incubated at room temperature for 1.5 hours.



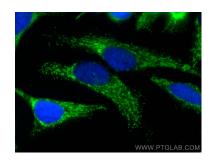
Immunohistochemical analysis of paraffinembedded human prostate cancer tissue slide using 66117-1-Ig (ECHS1 antibody) at dilution of 1:1000 (under 10x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human prostate cancer tissue slide using 66117-1-1g (ECHS1 antibody) at dilution of 1:1000 (under 40x lens. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-ECHS1 (IP:66117-1-Ig, 3ug; Detection:66117-1-Ig 1:1000) with HepG2 cells lysate 3600ug.



Immunofluorescent analysis of (-20°C Methanol) fixed Hela cells using ECHS1 antibody (66117-1-lg, Clone: 2B9D5) at dilution of 1:800 and CoraLite®488-Conjugated AffiniPure Goat Anti-Mouse IgG(H+L).