

For Research Use Only

CAD Polyclonal antibody

Catalog Number: 16617-1-AP

Featured Product

12 Publications



Basic Information

Catalog Number:

16617-1-AP

Size:

150ul, Concentration: 600 ug/ml by Nanodrop;

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG9912

GenBank Accession Number:

BC014178

GeneID (NCBI):

790

UNIPROT ID:

P27708

Full Name:

carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase

Calculated MW:

2225 aa, 243 kDa

Observed MW:

240 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

WB: 1:500-1:1000

IP: 0.5-4.0 ug for 1.0-3.0 mg of total protein lysate

IHC: 1:50-1:500

IF/ICC: 1:20-1:200

Applications

Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

Cited Applications:

WB, IHC, IF, IP

Species Specificity:

human

Cited Species:

human, mouse, pig

Positive Controls:

WB: HEK-293 cells,

IP: HEK-293 cells,

IHC: human liver cancer tissue, mouse liver tissue

IF/ICC: HEK-293 cells,

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

Background Information

CAD (carbamoyl-phosphate synthetase 2, aspartate transcarbamoylase, and dihydroorotase) is a multifunctional enzyme required for the de novo synthesis of pyrimidine nucleotides (PMID:25422319). CAD initiates and controls the flux through the pathway and is regulated by allosteric effectors and phosphorylations through different signaling cascades (PMID:12438317). Moreover, CAD is found upregulated in tumors, while mutations that compromise its function are the cause of a severe infantile epileptic disease (PMID:36677714).

Notable Publications

Author	Pubmed ID	Journal	Application
Yihan Zhu	36087034	Cancer Sci	WB
Xiaoxue Song	33206174	Carcinogenesis	WB
Yajing Lv	33186350	PLoS Biol	WB, IHC

Storage

Storage:

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

Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

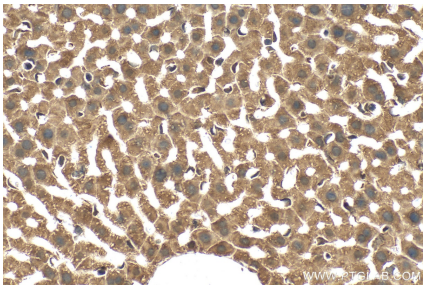
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

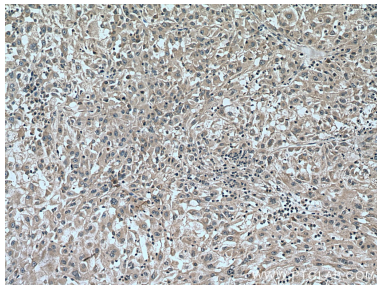
E: proteintech@ptglab.com
W: ptglab.com

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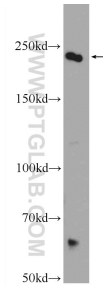
Selected Validation Data



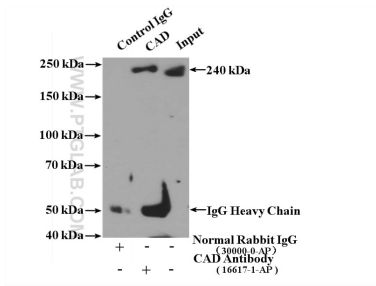
Immunohistochemical analysis of paraffin-embedded mouse liver tissue slide using 16617-1-AP (CAD antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



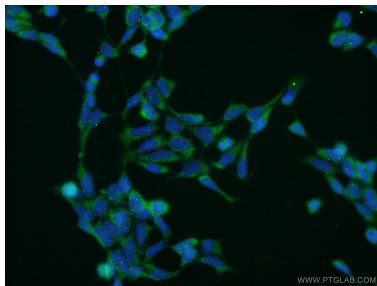
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 16617-1-AP (CAD antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



HEK-293 cells were subjected to SDS PAGE followed by western blot with 16617-1-AP (CAD Antibody) at dilution of 1:600 incubated at room temperature for 1.5 hours.



IP result of anti-CAD (IP:16617-1-AP, 4ug; Detection:16617-1-AP 1:500) with HEK-293 cells lysate 2800ug.



Immunofluorescent analysis of HEK-293 cells using 16617-1-AP (CAD antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated Goat Anti-Rabbit IgG(H+L).