

For Research Use Only

# ACAA1 Polyclonal antibody

Catalog Number: 12319-2-AP **18 Publications**



## Basic Information

<b>Catalog Number:</b> 12319-2-AP	<b>GenBank Accession Number:</b> BC011977	<b>Purification Method:</b> Antigen affinity purification
<b>Size:</b> 550 µg/ml	<b>GeneID (NCBI):</b> 30	<b>Recommended Dilutions:</b> WB 1:500-1:2000 IHC 1:20-1:200 IF/ICC 1:250-1:1000
<b>Source:</b> Rabbit	<b>UNIPROT ID:</b> P09110	
<b>Isotype:</b> IgG	<b>Full Name:</b> acetyl-Coenzyme A acyltransferase 1	
<b>Immunogen Catalog Number:</b> AG2972	<b>Calculated MW:</b> 424 aa, 44 kDa	
	<b>Observed MW:</b> 41 kDa	

## Applications

<b>Tested Applications:</b> WB, IHC, IF/ICC, ELISA	<b>Positive Controls:</b> WB : L02 cells, A549 cells, human lung tissue
<b>Cited Applications:</b> WB, IHC, IF	<b>IHC :</b> human thyroid cancer tissue, human lung tissue, human prostate cancer tissue, human liver cancer tissue
<b>Species Specificity:</b> human, mouse, rat	<b>IF/ICC :</b> U-251 cells,
<b>Cited Species:</b> human, mouse, rat	
<b>Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0</b>	

## Background Information

ACAA1 (acetyl-CoA acyltransferase 1) is an enzyme involved in lipid  $\beta$ -oxidation and provides substrates to the tricarboxylic acid (TCA) cycle, a critical step in cellular metabolism (PMID:33194642). ACAA1 is also a biomarker in type 2 diabetes (T2D), predicting the pre-diabetic metabolic signature in mouse models (PMID:25784953). Moreover, ACAA1 is highly expressed in TNBC, serving as a potential therapeutic target in ACAA1-high tumors and a predictive biomarker of resistance to CDK4/6 inhibitors for RB1-proficient patients (PMID:37129951).

## Notable Publications

Author	Pubmed ID	Journal	Application
Pablo Ranea-Robles	34651140	Kidney360	WB
Lei Ye	33491741	Int J Oncol	WB
Chaochao Luo	30499671	J Agric Food Chem	IF

## 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:

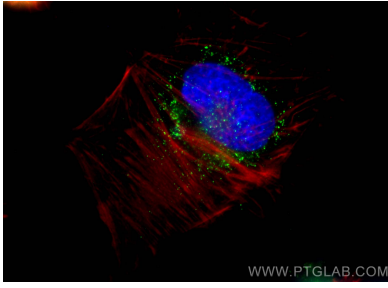
T: 4006900926

E: Proteintech-CN@ptglab.com

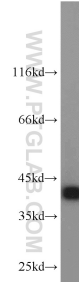
W: ptgcn.com

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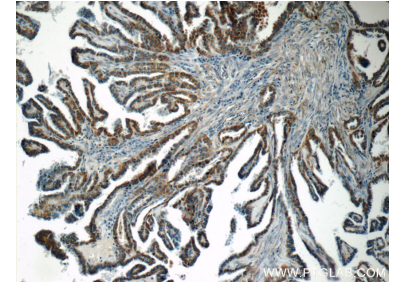
## Selected Validation Data



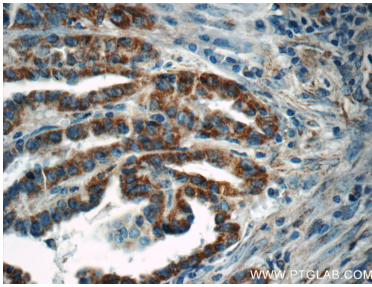
Immunofluorescent analysis of (-20°C Ethanol) fixed U-251 cells using 12319-2-AP (ACAA1 antibody), at dilution of 1:500 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).



L02 cells were subjected to SDS PAGE followed by western blot with 12319-2-AP (ACAA1 antibody) at dilution of 1:1000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded human thyroid cancer tissue slide using 12319-2-AP (ACAA1 Antibody) at dilution of 1:50 (under 10x lens).



Immunohistochemical analysis of paraffin-embedded human thyroid cancer tissue slide using 12319-2-AP (ACAA1 Antibody) at dilution of 1:50 (under 40x lens).