#### For Research Use Only

# ACAA1 Polyclonal antibody

Catalog Number:12319-2-AP 18 Publications



**Basic Information** 

Catalog Number: GenBank Accession Number:

12319-2-AP BC011977 GeneID (NCBI): Size: 150ul , Concentration: 550 ug/ml by

Nanodrop: **UNIPROT ID:** P09110

Rabbit Full Name:

Isotype: acetyl-Coenzyme A acyltransferase 1

IgG Calculated MW: Immunogen Catalog Number: 424 aa, 44 kDa AG2972 Observed MW: 41 kDa

**Applications** 

**Tested Applications:** 

WB, IHC, IF/ICC, ELISA

Cited Applications: WB, IHC, IF Species Specificity:

human, mouse, rat **Cited Species:** human, mouse, rat

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

buffer pH 6.0

Antigen affinity purification Recommended Dilutions:

WB 1:500-1:2000 IHC 1:20-1:200 IF/ICC 1:250-1:1000

**Purification Method:** 

**Positive Controls:** 

WB: LO2 cells, A549 cells, human lung tissue

IHC: human thyroid cancer tissue, human lung tissue, human prostate cancer tissue, human liver cancer

IF/ICC: U-251 cells,

## **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.

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

Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

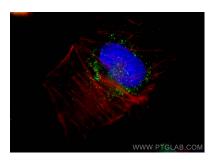
For technical support and original validation data for this product please contact:

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

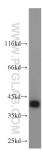
E: proteintech@ptglab.com W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

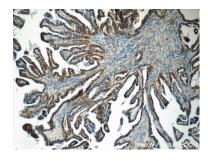
### **Selected Validation Data**



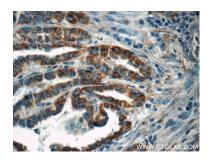
Immunofluorescent analysis of (-20°C Ethanol) fixed U-251 cells using 12319-2-AP (ACAA1 antibody), at dilution of 1:500 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L).



LO2 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 paraffinembedded human thyroid cancer tissue slide using 12319-2-AP (ACAA1 Antibody) at dilution of 1:50 (under 10x lens).



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