### For Research Use Only

# **OXCT1** Polyclonal antibody

Catalog Number: 12175-1-AP

Featured Product

52 Publications



**Basic Information** 

Catalog Number:

12175-1-AP

BC009001

Concentration:

550 ug/ml

Source:

Rabbit

P55809

Isotype:

GenBank Accession Number:

BC009001

GeneID (NCBI):

5019

UNIPROT ID:

P55809

Full Name:

gG 3-oxoacid CoA transferase 1

Immunogen Catalog Number:Calculated MW:AG2818520 aa, 56 kDaObserved MW:

56 kDa

Purification Method: Antigen affinity purification Recommended Dilutions:

WB 1:1000-1:8000

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

protein lysate IHC 1:50-1:500 IF/ICC 1:300-1:1200

# **Applications**

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

Species Specificity: human, mouse, rat Cited Species:

human, mouse, rat, bovine

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: mouse brain tissue, HeLa cells, mouse skeletal muscle tissue, rat skeletal muscle tissue

IP: mouse brain tissue,

IHC : human gliomas tissue, mouse heart tissue, mouse brain tissue, human prostate cancer tissue

IF/ICC: HeLa cells, MCF-7 cells

# **Background Information**

3-oxoacid-CoA transferase 1 (OXCT1), encoded by nuclear gene, is a mitochondrial CoA transferase required for ketone body degradation. It catalyzes the transfer of CoA from succinyl-CoA to acetoacetate, generating acetoacetyl-CoA. OXCT1 is expressed in brain, heart, and skeletal muscle, but not in liver. This antibody specifically recognizes endogenous OXCT1. (21209089)

### **Notable Publications**

| Author            | Pubmed ID | Journal        | Application |
|-------------------|-----------|----------------|-------------|
| Nguyen Ngoc Trang | 36184012  | J Nutr Biochem | WB          |
| De Huang          | 27644987  | Cell Res       | WB          |
| Tim Düking        | 36112685  | Sci Adv        | WB,IF       |

## Storage

Storage:

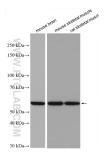
Store at -20°C. Stable for one year after shipment.

Storage Buffer:

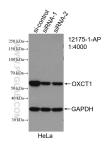
PBS with 0.02% sodium azide and 50% glycerol, pH7.3  $\,$ 

Aliquoting is unnecessary for -20°C storage

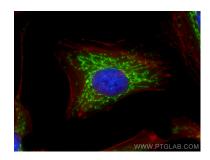
### Selected Validation Data



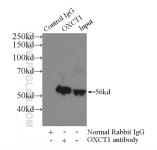
Various lysates were subjected to SDS PAGE followed by western blot with 12175-1-AP (OXCT1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



WB result of OXCT1 antibody (12175-1-AP; 1:4000; incubated at room temperature for 1.5 hours) with sh-Control and sh-OXCT1 transfected HeLa cells.



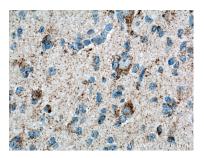
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using OXCT1 antibody (12175-1-AP) at dilution of 1:600 and Coralite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L), CL594-Phalloidin (red).



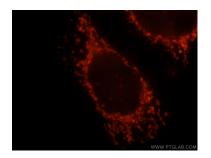
IP result of anti-OXCT1 (IP:12175-1-AP, 3ug; Detection:12175-1-AP 1:1000) with mouse brain tissue lysate 4000ug.



Immunohistochemical analysis of paraffinembedded human gliomas tissue slide using 12175-1-AP (OXCT1 antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded human gliomas tissue slide using 12175-1-AP (OXCT1 antibody at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of MCF-7 cells, using OXCT1 antibody 12175-1-AP at 1:25 dilution and Rhodamine-labeled goat anti-rabbit IgG (red).