

For Research Use Only

# citrate synthase Polyclonal antibody

Catalog Number: 16131-1-AP

Featured Product

85 Publications



## Basic Information

### Catalog Number:

16131-1-AP

### Concentration:

350 ug/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG9117

### GenBank Accession Number:

BC010106

### GeneID (NCBI):

1431

### UNIPROT ID:

O75390

### Full Name:

citrate synthase

### Calculated MW:

466 aa, 52 kDa

### Observed MW:

45-50 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB 1:2000-1:16000

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

IHC 1:100-1:400

IF/ICC 1:50-1:500

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF, IP, CoIP

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat, rabbit, chicken, hamster

**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, mouse heart tissue, HepG2 cells, MDA-MB-231 cells

**IP** : mouse heart tissue,

**IHC** : human liver cancer tissue,

**IF/ICC** : HepG2 cells,

## Background Information

Citrate synthase (CS), the first and rate-limiting enzyme of the tricarboxylic acid cycle, plays a key role in regulating energy generation of mitochondrial respiration(PMID:19479947).It belongs to the citrate synthase family. The deduced 466-amino acid protein contains an N-terminal mitochondrial targeting sequence and a motif highly conserved in citrate synthases(PMID:12549038). It can exist as a dimer(PMID:8749851). Northern blot analysis detected no CS expression in thymus and small intestine(PMID:12549038). This antibody is specific to CS.

## Notable Publications

Author	Pubmed ID	Journal	Application
Avinash Kumar	31574345	Free Radic Biol Med	WB
Wenliang Zhang	34580406	Sci Rep	WB
Teresa W-M Fan	36150727	J Immunol	

## 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:

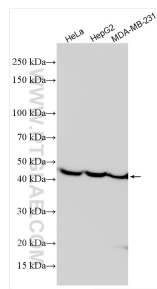
T: 4006900926

E: Proteintech-CN@ptglab.com

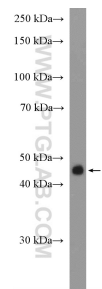
W: ptgcn.com

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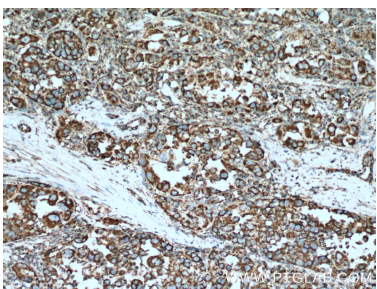
Selected Validation Data



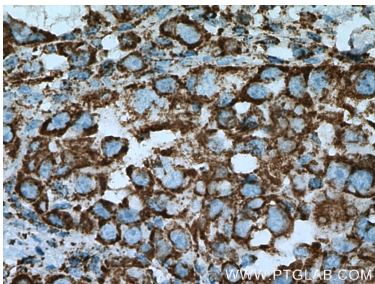
Various lysates were subjected to SDS PAGE followed by western blot with 16131-1-AP (Citrate synthase antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



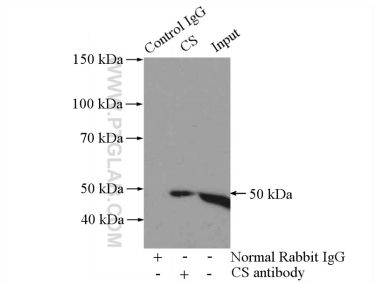
mouse heart tissue were subjected to SDS PAGE followed by western blot with 16131-1-AP (Citrate synthase antibody at dilution of 1:4000 incubated at room temperature for 1.5 hours.



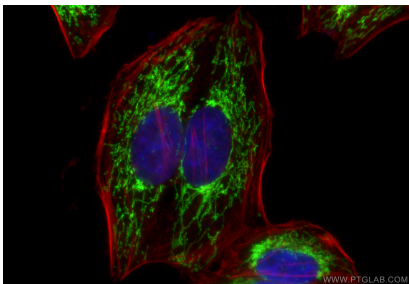
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 16131-1-AP (Citrate synthase antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 16131-1-AP (Citrate synthase antibody at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



IP result of anti-Citrate synthase (IP:16131-1-AP, 4ug; Detection:16131-1-AP 1:1000) with mouse heart tissue lysate 3200ug.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using Citrate synthase antibody (16131-1-AP) at dilution of 1:200 and Multi-rAb Coralite ® Plus 488-Goat Anti-Rabbit Recombinant Secondary Antibody (H+L) (RGAR002), CL594-Phalloidin (red).