

## Citrate synthase Polyclonal antibody

Catalog Number: 16131-1-AP

Featured Product

88 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, pH7.3

Aliquoting is unnecessary for -20°C storage

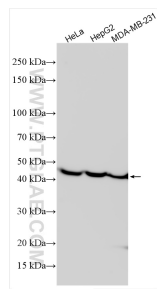
For technical support and original validation data for this product please contact:

T: 4006900926

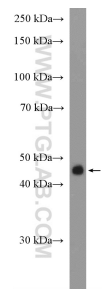
E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)W: [ptgcn.com](http://ptgcn.com)

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

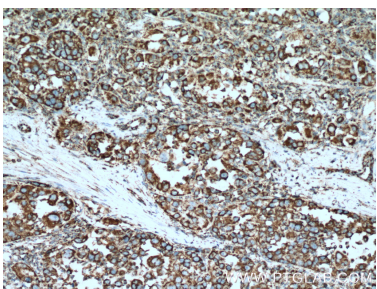
Selected Validation Data



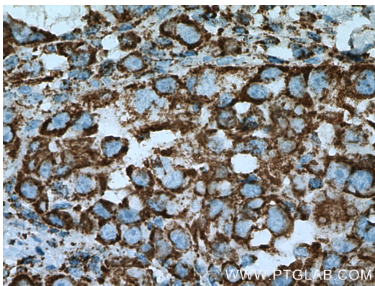
Various lysates were subjected to SDS PAGE followed by western blot with 16131-1-AP (Citrate synthase antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



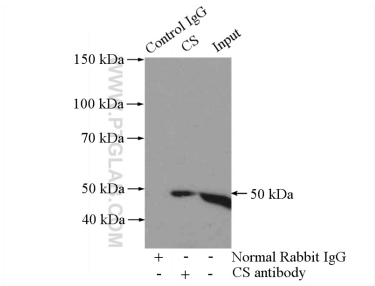
mouse heart tissue were subjected to SDS PAGE followed by western blot with 16131-1-AP (Citrate synthase antibody at dilution of 1:4000 incubated at room temperature for 1.5 hours.



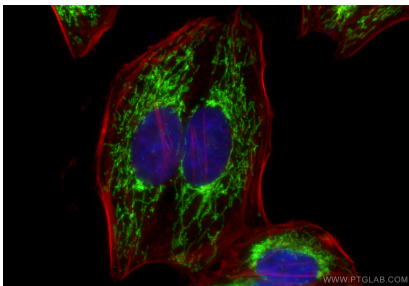
Immunohistochemical analysis of paraffin-embedded human liver cancer tissue slide using 16131-1-AP (Citrate synthase antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).