

## Citrate synthase Polyclonal antibody

Catalog Number: 16131-1-AP

Featured Product

75 Publications

## Basic Information

## Catalog Number:

16131-1-AP

## Size:

150ul, Concentration: 350 µg/ml by Nanodrop and 313 µg/ml by Bradford method using BSA as the standard;

## 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 1:1000-1:8000

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

IHC 1:100-1:400

IF 1:50-1:500

## Applications

## Tested Applications:

IF, IHC, IP, WB, ELISA

## Cited Applications:

CoIP, IF, IHC, IP, WB

## Species Specificity:

human, mouse, rat

## Cited Species:

human, chicken, rat, mouse, rabbit, 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: mouse heart tissue, HeLa cells

IP: mouse heart tissue,

IHC: human liver cancer tissue,

IF: 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

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

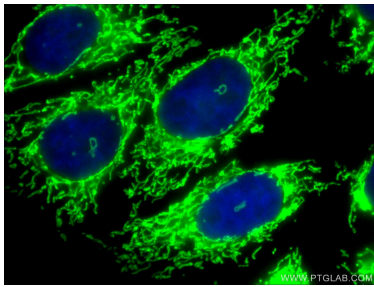
For technical support and original validation data for this product please contact:

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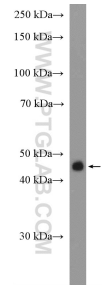
E: [proteintech@ptglab.com](mailto:proteintech@ptglab.com)  
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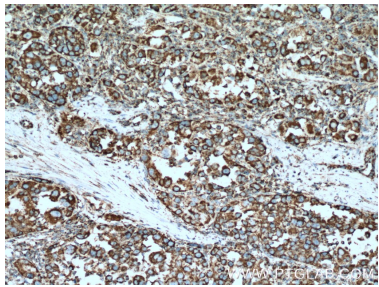
Selected Validation Data



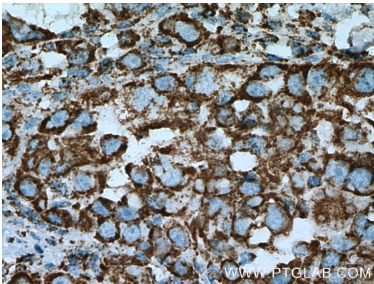
Immunofluorescent analysis of (10% Formaldehyde) fixed HepG2 cells using 16131-1-AP (Citrate synthase antibody) at dilution of 1:50 and Alexa Fluor 488-conjugated AffiniPure Goat Anti-Rabbit IgG(H+L).



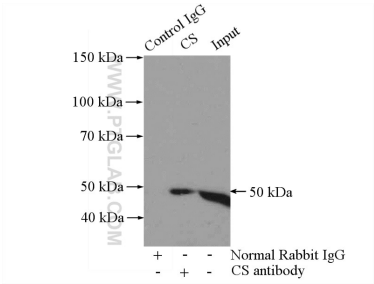
mouse heart tissue were subjected to SDS PAGE followed by western blot with 16131-1-AP (Citrate synthase antibody at dilution of 1:4000 incubated at room temperature for 1.5 hours.



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.