For Research Use Only

citrate synthase Polyclonal antibody

Catalog Number: 16131-1-AP

Featured Product

85 Publications



Basic Information

Catalog Number:

GenBank Accession Number:

16131-1-AP BC010106

GeneID (NCBI):

150ul, Concentration: 400 ug/ml by

Genero (NCBI):

Nanodrop;

UNIPROT ID: 075390

Rabbit Isotype: IgG Full Name: citrate synthase Calculated MW:

Immunogen Catalog Number:

466 aa, 52 kDa

AG9117

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 exsit 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.

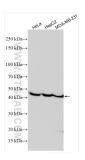
Storage Buffer

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

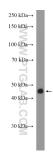
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

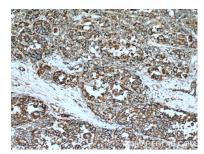
Selected Validation Data



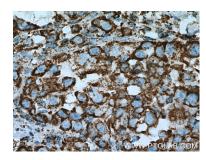
Various lysates were subjected to SDS PAGE followed by western blot with 16131-1-AP (Citrate synthase antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



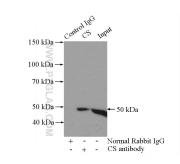
mouse heart tissue were subjected to SDS PAGE followed by western blot with 16131-1-AP (Citrate synthase antibody at dilution of 1:4000 incubated at room temperature for 1.5 hours.



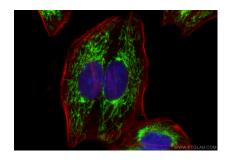
Immunohistochemical analysis of paraffinembedded human liver cancer tissue slide using 16131-1-AP (Citrate synthase antibody at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffinembedded 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).