

For Research Use Only

# SUCLA2 Polyclonal antibody

Catalog Number: 12627-1-AP

Featured Product

23 Publications



## Basic Information

### Catalog Number:

12627-1-AP

### Concentration:

500 µg/ml

### Source:

Rabbit

### Isotype:

IgG

### Immunogen Catalog Number:

AG3319

### GenBank Accession Number:

BC027587

### GeneID (NCBI):

8803

### UNIPROT ID:

Q9P2R7

### Full Name:

succinate-CoA ligase, ADP-forming, beta subunit

### Calculated MW:

463 aa, 50 kDa

### Observed MW:

48-50 kDa

### Purification Method:

Antigen affinity purification

### Recommended Dilutions:

WB: 1:1000-1:6000

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

IHC: 1:50-1:500

IF/ICC: 1:200-1:800

## Applications

### Tested Applications:

WB, IHC, IF/ICC, IP, ELISA

### Cited Applications:

WB, IHC, IF

### Species Specificity:

human, mouse, rat

### Cited Species:

human, mouse, rat

**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**: HEK-293 cells, L02 cells, SH-SY5Y cells, HepG2 cells, PC-3 cells, mouse brain tissue, mouse liver tissue

**IP**: HEK-293 cells,

**IHC**: human colon cancer tissue, human heart tissue, human kidney tissue

**IF/ICC**: HepG2 cells,

## Background Information

SUCLA2,  $\beta$  subunit of succinate-CoA ligase, contributes to energy production in mitochondria through the succinate-CoA ligase enzyme. Succinate-CoA ligase catalyses the reversible conversion of succinyl-CoA and ADP or GDP to succinate and ATP or GTP. SUCLA2 mutations cause global protein succinylation and mitochondrial DNA depletion (PMID: 33230181, PMID: 20301762). Mutations in SUCLA2 are also associated with SUCLA2-related mitochondrial DNA depletion syndrome, Leigh syndrome, down syndrome (PMID: 23010432).

## Notable Publications

| Author           | Pubmed ID | Journal                  | Application |
|------------------|-----------|--------------------------|-------------|
| Rosalba Carrozzo | 26475597  | J Inherit Metab Dis      | WB          |
| Shaoping Huang   | 27766610  | Folia Histochem Cytobiol | WB, IHC     |
| Minghao Yuan     | 36186135  | Aging Dis                | WB          |

## 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:

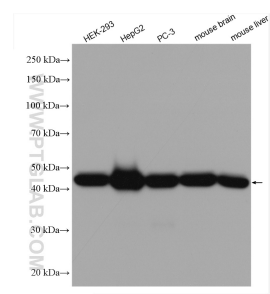
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

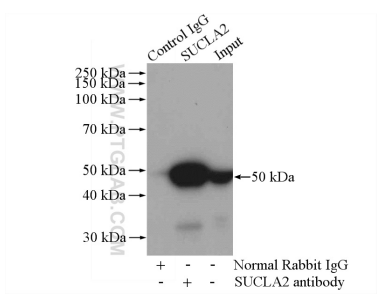
W: [ptgcn.com](http://ptgcn.com)

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

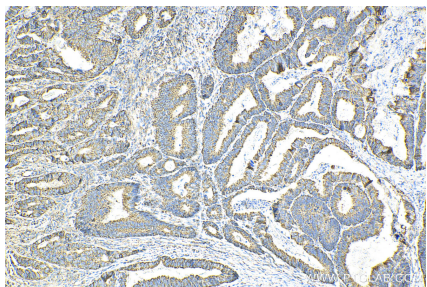
Selected Validation Data



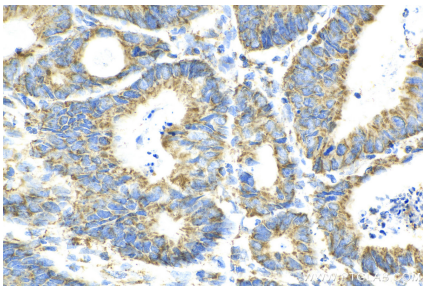
HEK-293 cells were subjected to SDS PAGE followed by western blot with 12627-1-AP (SUCLA2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



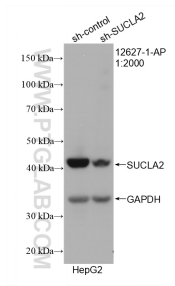
IP result of anti-SUCLA2 (IP:12627-1-AP, 4ug; Detection:12627-1-AP 1:1000) with HEK-293 cells lysate 2800ug.



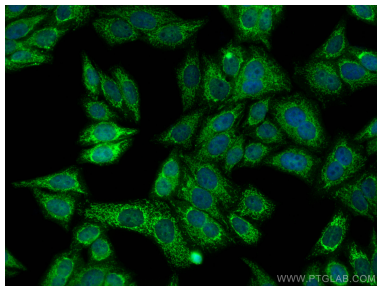
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 12627-1-AP (SUCLA2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 12627-1-AP (SUCLA2 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



WB result of SUCLA2 antibody (12627-1-AP; 1:2000; incubated at room temperature for 1.5 hours) with sh-Control and sh-SUCLA2 transfected HepG2 cells.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using SUCLA2 antibody (12627-1-AP) at dilution of 1:400 and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L).