

For Research Use Only

SUCLA2 Polyclonal antibody

Catalog Number: 12627-1-AP

Featured Product

22 Publications



Basic Information

Catalog Number:

12627-1-AP

Size:

150ul, Concentration: 500 ug/ml by Nanodrop;

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 ug 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, β 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

*** 20ul sizes contain 0.1% BSA

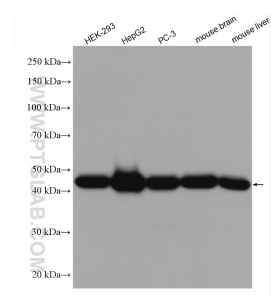
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

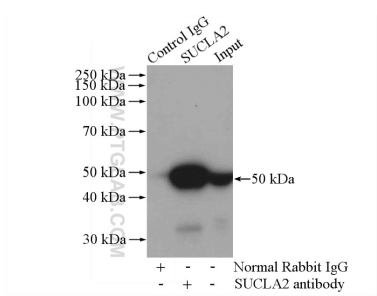
E: proteintech@ptglab.com
W: ptglab.com

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

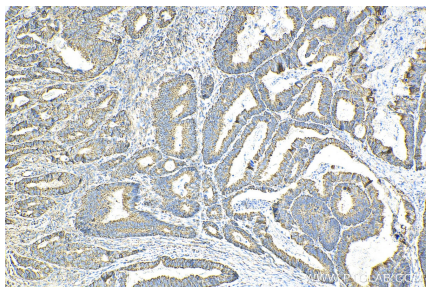
Selected Validation Data



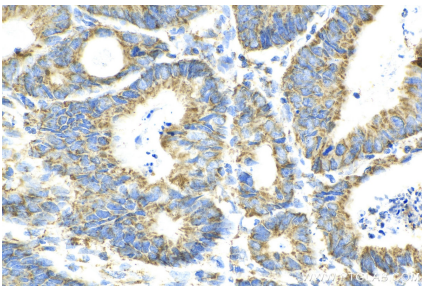
HEK-293 cells were subjected to SDS PAGE followed by western blot with 12627-1-AP (SUCLA2 antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



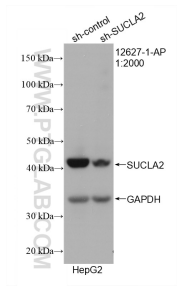
IP result of anti-SUCLA2 (IP:12627-1-AP, 4ug; Detection:12627-1-AP 1:1000) with HEK-293 cells lysate 2800ug.



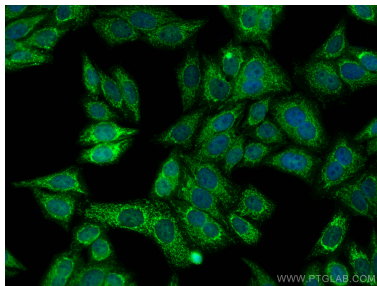
Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 12627-1-AP (SUCLA2 antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



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).