For Research Use Only

SUCLA2 Monoclonal antibody

Catalog Number: 68549-1-Ig



Basic Information

Catalog Number: GenBank Accession Number:

68549-1-lg BC027587 Protein A purification GeneID (NCBI): CloneNo.:

150ul, Concentration: 1000 ug/ml by 8803 2C7E4 Nanodrop: **UNIPROT ID:** Recommended Dilutions:

Q9P2R7 WB 1:2000-1:16000 Mouse IHC 1:500-1:2000 Full Name: IF/ICC 1:500-1:2000

Isotype: succinate-CoA ligase, ADP-forming, lgG2b beta subunit

Immunogen Catalog Number: Calculated MW: 463 aa, 50 kDa AG17967

Observed MW: 48-50 kDa

Applications

Tested Applications: WB, IHC, IF/ICC, ELISA

Species Specificity: human, mouse

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: HepG2 cells, LNCaP cells, HeLa cells, Jurkat cells,

Purification Method:

K-562 cells, mouse brain tissue IHC: human colon cancer tissue.

IF/ICC: Caco-2 cells, HepG2 cells

Background Information

 $SUCLA2, \beta \ subunit \ of succinate-CoA \ ligase, contributes \ to \ energy \ production \ in \ mitochondria \ through \ the \ succinate-CoA \ ligase, contributes \ to \ energy \ production \ in \ mitochondria \ through \ the \ succinate-CoA \ ligase, \ contributes \ to \ energy \ production \ in \ mitochondria \ through \ the \ succinate-CoA \ ligase, \ contributes \ to \ energy \ production \ in \ mitochondria \ through \ the \ succinate-CoA \ ligase, \ contributes \ to \ energy \ production \ in \ mitochondria \ through \ the \ succinate-CoA \ ligase, \ contributes \ to \ energy \ production \ in \ mitochondria \ through \ the \ succinate-CoA \ ligase, \ contributes \ to \ energy \ production \ in \ mitochondria \ through \ the \ succinate-CoA \ ligase, \ contributes \ through \ th$ 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).

Storage

Storage:

Store at -20°C. Stable for one year after shipment.

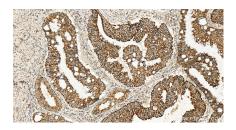
Storage Buffer:

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

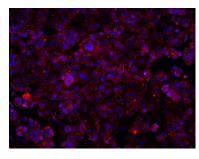
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

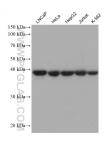
Selected Validation Data



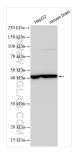
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 68549-1-Ig (SUCLA2 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



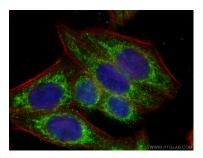
Immunofluorescent analysis of (4% PFA) fixed Caco-2 cells using SUCLA2 antibody (68549-1-1g, Clone: 2C7E4) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004).



Various lysates were subjected to SDS PAGE followed by western blot with 68549-1-1g (SUCLA2 antibody) at dilution of 1:9900 incubated at room temperature for 1.5 hours.



Various lysates were subjected to SDS PAGE followed by western blot with 68549-1-lg (SUCLA2 antibody) at dilution of 1:8000 incubated at room temperature for 1.5 hours.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using SUCLA2 antibody (68549-1-lg, Clone: 2C7E4) at dilution of 1:800 and Multi-rAb CoraLite ® Plus 488-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (RGAM002), CL594-phalloidin (red).