## For Research Use Only

## SUCLA2 Monoclonal antibody

Catalog Number: 68549-1-Ig



**Basic Information** 

Catalog Number: 68549-1-lg Concentration:

1000 ug/ml Source: Mouse Isotype: lgG2b

Immunogen Catalog Number:

AG17967

BC027587 GeneID (NCBI): 8803

GenBank Accession Number:

**UNIPROT ID:** Q9P2R7 Full Name:

> succinate-CoA ligase, ADP-forming, beta subunit

Calculated MW: 463 aa, 50 kDa 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

**Purification Method:** 

Protein A purification

CloneNo.: 2C7E4

**Recommended Dilutions:** WB 1:2000-1:16000

IHC 1:500-1:2000 IF/ICC 1:500-1:2000

Positive Controls:

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

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

IF/ICC: Caco-2 cells, HepG2 cells

**Background Information** 

SUCLA2,  $\,eta\,$  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).

Storage

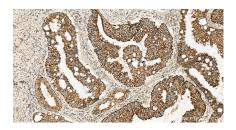
Storage:

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

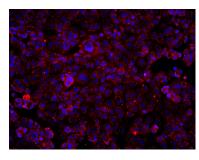
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

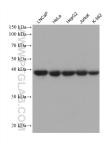
## **Selected Validation Data**



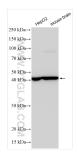
Immunohistochemical analysis of paraffinembedded human colon cancer tissue slide using 68549-1-Ig (SUCLA2 antibody) at dilution of 1:1000 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



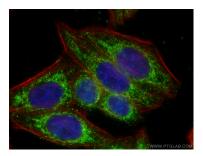
Immunofluorescent analysis of (4% PFA) fixed Caco-2 cells using SUCLA2 antibody (68549-1-1g, Clone: 2C7E4) at dilution of 1:1000 and Multi-rAb CoraLite® Plus 594-Goat Anti-Mouse Recombinant Secondary Antibody (H+L) (Cat.NO. RGAM004).



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 (68549-1-1g, 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).