

For Research Use Only

SDHAF4 Polyclonal antibody

Catalog Number: 30663-1-AP



Basic Information

Catalog Number:

30663-1-AP

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG33549

GenBank Accession Number:

BC104649

GeneID (NCBI):

135154

UNIPROT ID:

Q5VUM1

Full Name:

chromosome 6 open reading frame 57

Observed MW:

15 kDa

Purification Method:

Antigen affinity purification

Recommended Dilutions:

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:

IHC, IF/ICC, IP, ELISA

Species Specificity:

human

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:

IP: THP-1 cells,

IHC: human cervical cancer tissue, human breast cancer tissue

IF/ICC: A431 cells, U2OS cells

Background Information

SDHAF4 (Succinate Dehydrogenase Assembly Factor 4) is a key mitochondrial protein specifically responsible for assisting in the assembly and stability of mitochondrial complex II (Succinate Dehydrogenase, SDH). This complex plays a central role in cellular energy metabolism by participating simultaneously in the tricarboxylic acid (TCA) cycle and the electron transport chain. Its function involves binding to the SDHA (flavoprotein) subunit, which is already associated with FAD, thereby preventing excessive ROS generation. It further promotes the assembly of SDHA with the iron-sulfur protein SDHB to form the catalytic dimer. This ensures the proper integration of complex II into the inner mitochondrial membrane, allowing it to participate in both the TCA cycle and electron transport. Deficiency of SDHAF4 leads to reduced SDH activity, accumulation of succinate, and elevated mitochondrial superoxide levels, which are associated with certain cardiomyopathies and tumor metabolic reprogramming.

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:

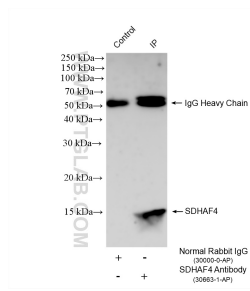
T: 4006900926

E: Proteintech-CN@ptglab.com

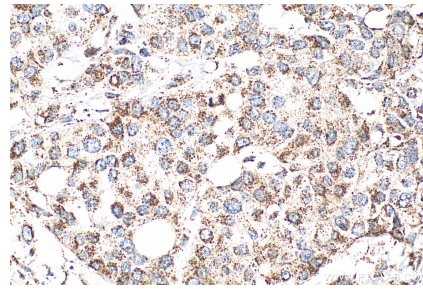
W: ptgcn.com

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

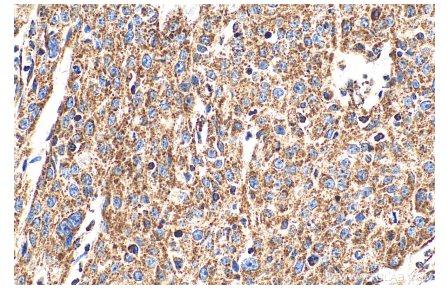
Selected Validation Data



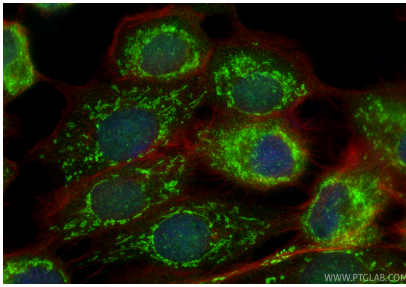
IP result of anti-SDHAF4 (IP:30663-1-AP, 4 μ g; Detection:30663-1-AP 1:1000) with THP-1 cells lysate 1800 μ g.



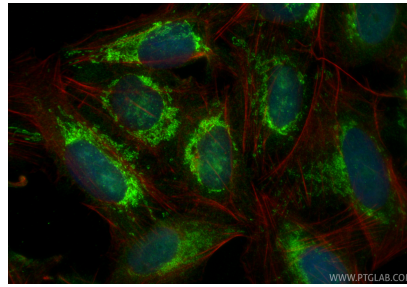
Immunohistochemical analysis of paraffin-embedded human breast cancer tissue slide using 30663-1-AP (C6orf57 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human cervical cancer tissue slide using 30663-1-AP (C6orf57 antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunofluorescent analysis of (4% PFA) fixed A431 cells using C6orf57 antibody (30663-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).



Immunofluorescent analysis of (4% PFA) fixed U2OS cells using C6orf57 antibody (30663-1-AP) at dilution of 1:400 and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), CL594-Phalloidin (red).