

Anti-SDHB Antibody

ER1803-63



Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell, IHC-P, FC
Molecular Wt:	Predicted band size: 32 kDa

Description: In aerobic respiration reactions, succinate dehydrogenase (SDH) catalyzes the oxidation of succinate and ubiquinone to fumarate and ubiquinol. Four subunits comprise the SDH protein complex: a flavochrome subunit (SDHA), an iron-sulfur protein (SDHB) and two membrane-bound subunits (SDHC and SDHD) anchored to the inner mitochondrial membrane. Mutations to these subunits cause mitochondrial dysfunction, corresponding to several distinct disorders. Mutations in the membrane bound components may cause hereditary paraganglioma, while SDHA mutations associate with juvenile encephalopathy as well as Leigh syndrome, a severe neurological disorder. Inactivating mutations in SDHB correlate with inherited, but not necessarily sporadic, cases of pheochromocytoma.

Immunogen: Recombinant protein within human SDHB aa 100-280.

Positive control: Wild-type Hela whole cell lysate, Rat liver tissue, human liver tissue, mouse liver tissue, 293T, HT-29, Hela, rat heart tissue, human liver tissue, human kidney tissue, human skin tissue, mouse colon tissue.

Subcellular location: Membrane, Mitochondrion, Mitochondrion inner membrane.

Database links: SwissProt: P21912 Human | Q9CQA3 Mouse | P21913 Rat

Recommended Dilutions:

WB	1:500-1:2,000
IF-Cell	1:50-1:200
IHC-P	1:50-1:200
FC	1:50-1:100

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4°C after thawing. Aliquot store at -20°C. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.

Hangzhou Huaan Biotechnology Co., Ltd.

Orders:0086-571-88062880

Technical:0086-571-89986345

Service mail:support@huabio.cn

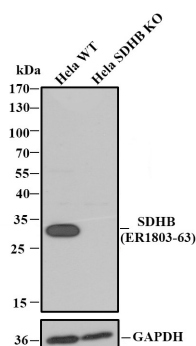
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Images

Fig1: All lanes: Western blot analysis of SDHB with anti-SDHB antibody (ER1803-63) at 1/1,000 dilution.

Lane 1: Wild-type Hela whole cell lysate.

Lane 2: SDHB knockout Hela whole cell lysate.



ER1803-63 was shown to specifically react with SDHB in wild-type Hela cells. No band was observed when SDHB knockout sample was tested. Wild-type and SDHB knockout samples were subjected to SDS-PAGE. Proteins were transferred to a PVDF membrane and blocked with 5% NFD in TBST for 1 hour at room temperature. The primary Anti-SDHB antibody (ER1803-63, 1/1,000) and Anti-GAPDH antibody (ET1601-4, 1/10,000) were used in 5% BSA at room temperature for 2 hours. Goat Anti-Rabbit IgG H&L (HRP) Secondary Antibody (HA1001) at 1:200,000 dilution was used for 1 hour at room temperature.

Cell lysate was provided by Ubigene Biosciences (Ubigene Biosciences Co., Ltd., Guangzhou, China).

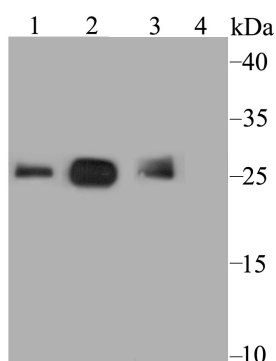


Fig2: Western blot analysis of SDHB on different lysates using anti-SDHB antibody at 1/1,000 dilution.

Positive control:

Lane 1: Human liver tissue lysate

Lane 2: Mouse liver tissue lysate

Lane 3: Rat liver tissue lysate

Lane 4: Rat liver tissue lysate, preincubated with the immunization protein.

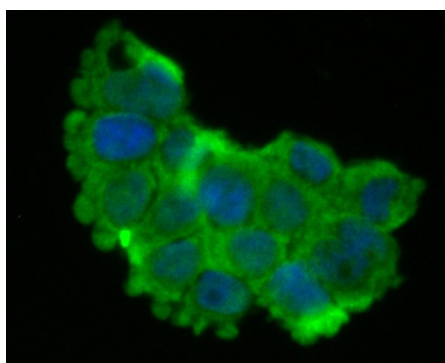


Fig3: ICC staining SDHB in 293T cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

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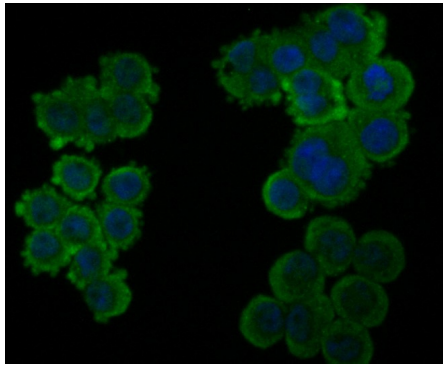


Fig4: ICC staining SDHB in HT-29 cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

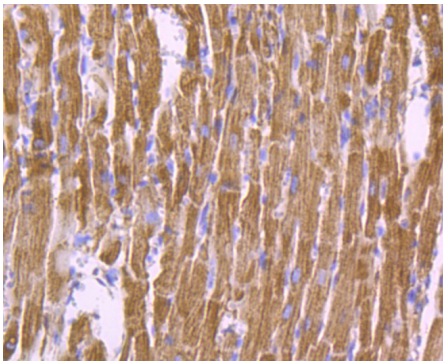


Fig5: Immunohistochemical analysis of paraffin-embedded rat heart tissue using anti-SDHB antibody. Counter stained with hematoxylin.

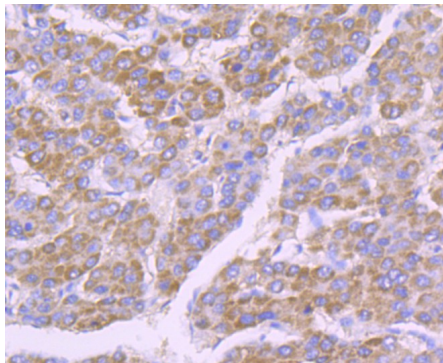


Fig6: Immunohistochemical analysis of paraffin-embedded human liver tissue using anti-SDHB antibody. Counter stained with hematoxylin.

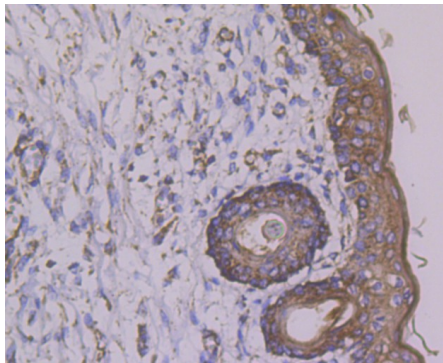


Fig7: Immunohistochemical analysis of paraffin-embedded human skin tissue using anti-SDHB antibody. Counter stained with hematoxylin.

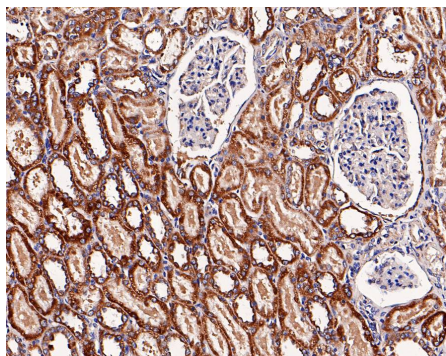


Fig8: Immunohistochemical analysis of paraffin-embedded human kidney tissue with Rabbit anti-SDHB antibody (ER1803-63) at 1/200 dilution.

The section was pre-treated using heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 20 minutes. The tissues were blocked in 1% BSA for 20 minutes at room temperature, washed with ddH₂O and PBS, and then probed with the primary antibody (ER1803-63) at 1/200 dilution for 1 hour at room temperature. The detection was performed using an HRP conjugated compact polymer system. DAB was used as the chromogen. Tissues were counterstained with hematoxylin and mounted with DPX.

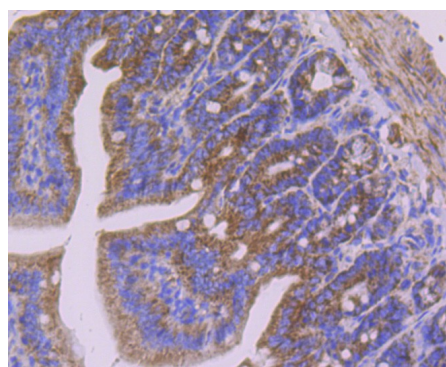


Fig9: Immunohistochemical analysis of paraffin-embedded mouse colon tissue using anti-SDHB antibody. Counter stained with hematoxylin.

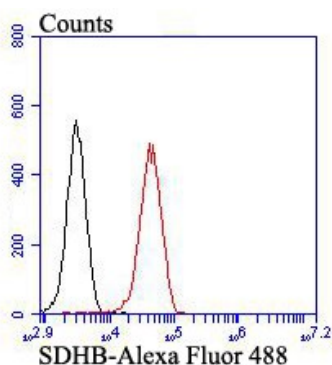


Fig10: Flow cytometric analysis of 293T cells with SDHB antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti-rabbit IgG was used as the secondary antibody.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

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