

SDHA Monoclonal Antibody (2E3GC12FB2AE2)

Product Details

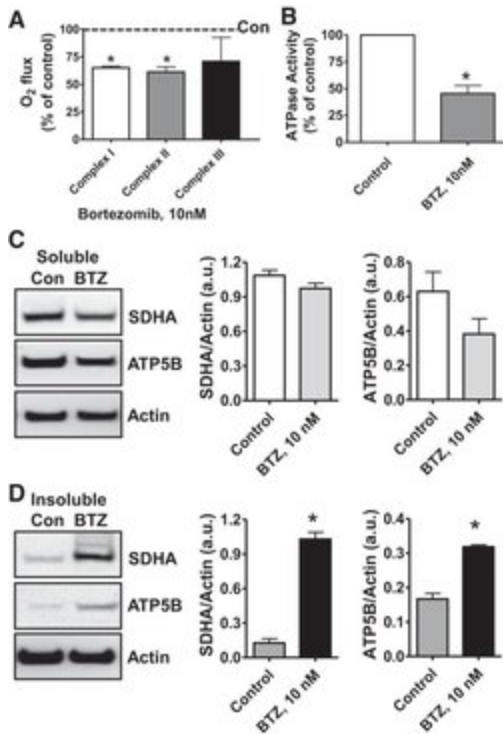
Size	100 µg
Species Reactivity	Bovine, Dog, Human, Mouse, Rat
Published Species	Dog, Rat, Human, Mouse
Host/Isotype	Mouse / IgG1, kappa
Class	Monoclonal
Type	Antibody
Clone	2E3GC12FB2AE2
Conjugate	Unconjugated
Immunogen	Full length native protein (purified) corresponding to Cow SDHA. Purified mitochondrial complex II (Cow).
Form	Liquid
Concentration	1 mg/mL
Purification	IgG fraction
Storage buffer	HEPES buffered saline
Contains	0.02% sodium azide
Storage conditions	4° C
RRID	AB_2532231

Applications	Tested Dilution	Publications
Western Blot (WB)	0.1 µg/mL	63 Publications
Immunohistochemistry (IHC)	Assay-dependent	4 Publications
Immunohistochemistry (Paraffin) (IHC (P))	-	2 Publications
Immunocytochemistry (ICC/IF)	1:200	3 Publications
Flow Cytometry (Flow)	1 µg/mL	-
Immunoprecipitation (IP)	-	1 Publication

Product Specific Information

ICC application requires heat-induced antigen retrieval where aldehydes are used as fixatives. Use 20min incubation at 90-100°C in 0.1 M Tris/HCl pH 9.5 with 5% urea (wt/vol).

Positive control: Human heart mitochondria.



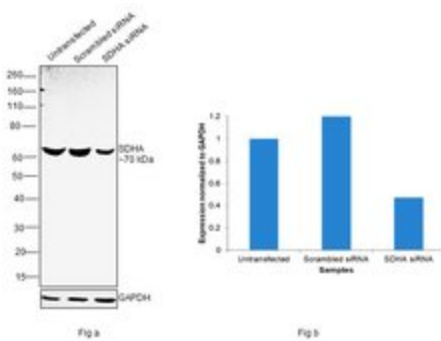
SDHA Antibody (459200)

Fig. 6. Open in a separate window Proteasome inhibition decreases mitochondrial respiration and impairs mitochondrial respiratory complex protein homeostasis in NRK cells. A : digitonin-permeabilized NRK cells (5×10^6) were treated with vehicle control (DMSO) or the ChT-L proteasome inhibitor bortezomib (BTZ; 10 nM) for 24 h. High-resolution respirometry was used to determine oxygen flux through complexes I, II, and III. Values are expressed as % of control of 4 independent experiments. Differences between groups were compared with an unpaired Student's t- test.

*Means are significantly different ($P < 0.05$) compared with control. B : ATPase activity of ATP synthase (complex V) was assayed in NRK cells treated with DMSO (vehicle control) or BTZ for 24 h. Renal cell extracts (10 mug) with or without oligomycin (20 muM) were incubated with the enzyme mix in the presence of ATP and NADPH (MitoCheck Complex V Activity Assay kit, Cayman). NADH oxidation rate was monitored at 340 nm for up to 30 min with a BioTek Gen5 microplate reader. Bar graph shows oligomycin-inhibitable ATPase activity expressed as % of control ($n = 3$). Differences between groups were compared with a Student's t- test. *Means are significantly different ($P < 0.001$). C and D : Western blots of SDHA and ATP5B in soluble (C) and insoluble fractions (D) of NRK cell extracts after treatment with vehicle control (Con; DMSO) or BTZ (10 nM) for 24 h. Representative blots of 4 independent experiments are shown Cell treatment validation info.

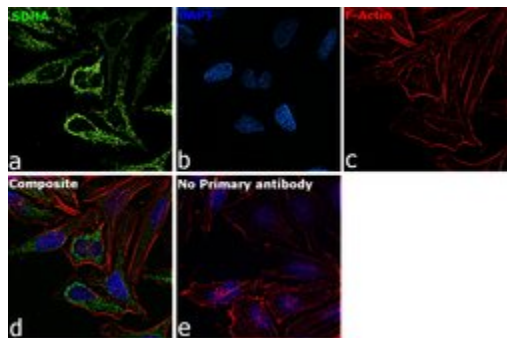
SDHA Antibody (459200)

Antibody specificity was demonstrated by siRNA mediated knockdown of target protein. SH-SY5Y cells were transfected with SDHA siRNA and decrease in signal intensity was observed in Western Blot application using Anti-SDHA Monoclonal Antibody (2E3GC12FB2AE2) (Product # 459200). Knockdown validation info.



Product Images For SDHA Monoclonal Antibody (2E3GC12FB2AE2)

SDHA Antibody (459200) in ICC/IF



Immunofluorescence analysis of SDHA was performed using 70% confluent log phase HeLa cells. The cells were fixed with 4% paraformaldehyde for 10 minutes, permeabilized with 0.1% Triton™ X-100 for 15 minutes, and blocked with 2% BSA for 45 minutes at room temperature. The cells were labeled with SDHA Monoclonal Antibody (2E3GC12FB2AE2) (Product # 459200) at 1:200 dilution in 0.1% BSA, incubated at 4 degree celsius overnight and then labeled with Goat anti-Mouse IgG (H+L) Highly Cross-Adsorbed Secondary Antibody, Alexa Fluor Plus 488 (Product # A32723), (1:2000 dilution), for 45 minutes at room temperature (Panel a: Green). Nuclei (Panel b:Blue) were stained with ProLong™ Diamond Antifade Mountant with DAPI (Product # P36962). F-actin (Panel c: Red) was stained with Rhodamine Phalloidin (Product # R415, 1:300 dilution). Panel d represents the merged image showing cytoplasmic (mitochondria-like) localization. Panel e represents control cells with no primary antibody to assess background. The images were captured at 60X magnification.

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Western Blot (63)

Genes

Leigh Syndrome Due to *NDUFV1* Mutations Initially Presenting as LBSL.

"459200 was used in Western Blotting to describe a case with infantile-onset neurodegeneration, psychomotor retardation, irritability, hypotonia, and nystagmus."

Authors: Borna NN, Kishita Y, Sakai N, Hamada Y, Kamagata K, Kohda M, Ohtake A, Murayama K, Okazaki Y

Species
Human

Dilution
Not Cited

Year
2020

Cell reports

A Broad Response to Intracellular Long-Chain Polyphosphate in Human Cells.

"459200 was used in Western Blotting to demonstrate that internally produced polyphosphates can activate diverse signalling pathways in human cells."

Authors: Bondy-Chorney E, Abramchuk I, Nasser R, Holinier C, Denoncourt A, Baijal K, McCarthy L, Khacho M, Lavallée-Adam M, Downey M

Species
Human

Dilution
Not Cited

Year
2020

[View more WB references on thermofisher.com](#)

Immunohistochemistry (4)

Animals : an open access journal from MDPI

SDHB and SDHA Immunohistochemistry in Canine Pheochromocytomas.

"Published figure using SDHA monoclonal antibody (Product # 459200) in Immunohistochemistry"

Authors: Abed FM, Brown MA, Al-Mahmood OA, Dark MJ

Species
Not Applicable
Dog

Dilution
Not Cited
1:100

Year
2020

Acta neuropathologica

Mutant desmin substantially perturbs mitochondrial morphology, function and maintenance in skeletal muscle tissue.

"Published figure using SDHA monoclonal antibody (Product # 459200) in Immunohistochemistry"

Authors: Winter L, Wittig I, Peeva V, Eggers B, Heidler J, Chevessier F, Kley RA, Barkovits K, Strecker V, Berwanger C, Herrmann H, Marcus K, Kornblum C, Kunz WS, Schröder R, Clemen CS

Species
Mouse

Dilution
1:1000

Year
2016

[View more IHC references on thermofisher.com](#)

More applications with references on thermofisher.com

IHC (P) (2)

ICC/IF (3)

IP (1)

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