

# Product Datasheet

## SDHB Antibody - BSA Free

### NBP1-54154

Unit Size: 0.1 ml

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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**NBP1-54154**

SDHB Antibody - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	1.14 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS and 30% Glycerol

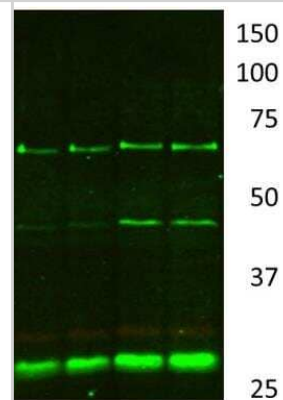
Product Description	
Host	Rabbit
Gene ID	6390
Gene Symbol	SDHB
Species	Human, Mouse
Reactivity Notes	Immunogen sequence has 92% identity to rat, cow and pig, 85% identity to Xenopus and 84% identity to Zebrafish.
Marker	Mitochondria Marker
Immunogen	A genomic peptide made to an N-terminal region of the human SDHB protein (within residues 1-150). [Swiss-Prot P21912]
Notes	Manufactured by Genomic Antibody Technology™. GAT <a href="#">FAQs</a>

Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:7000, Immunohistochemistry 1:50-1:100, Immunocytochemistry/ Immunofluorescence 1:50-1:100, Immunohistochemistry-Paraffin 1:50-1:100
Application Notes	This SDHB antibody is useful for ICC/IF, IHC and Western blot where a band is seen ~31 kDa. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended.

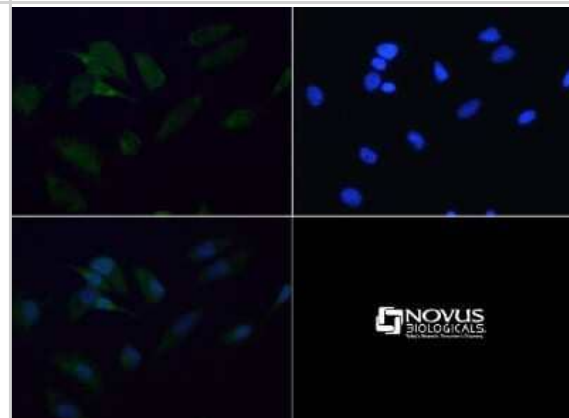


## Images

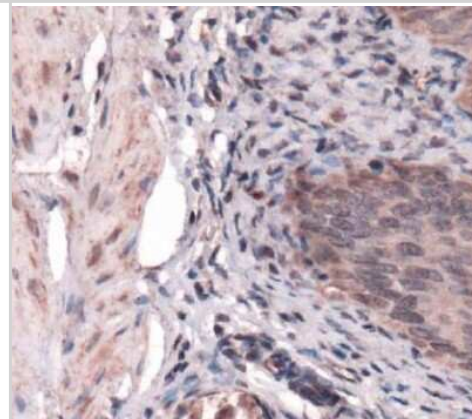
Western Blot: SDHB Antibody [NBP1-54154] - analysis of SDHB in porcine whole skeletal muscle lysate using anti-SDHB antibody. The primary antibody was used at a dilution of 1:2000 and incubated for 18 hours at 4C. Image from verified customer review.



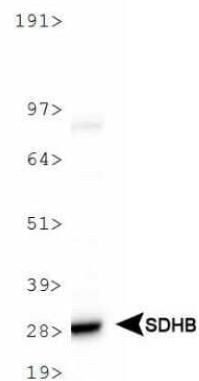
Immunocytochemistry/Immunofluorescence: SDHB Antibody [NBP1-54154] - ICC staining of SDHB in HeLa cells with FITC (green). Nuclei were counterstained with Dapi (blue).



Immunohistochemistry: SDHB Antibody [NBP1-54154] - IHC staining of SDHB in mouse bladder.



Western Blot: SDHB Antibody [NBP1-54154] - Detection of SDHB in mouse kidney lysate.



## Publications

VAsquez-Trincado C, Patel M, Sivaramakrishnan A et al. Adaptation of the heart to Frataxin depletion: Evidence that integrated stress response can predominate over mTORC1 activation Human molecular genetics 2021-09-22 [PMID: 34550363]

Sikorski K, Mehta A et al. A high-throughput pipeline for validation of antibodies. Nat Methods 2018-01-11 [PMID: 30377371] (Human)

### Details:

Antibody validation based on denaturing gel electrophoresis of biotinylated cell lysates (PAGE) followed by mass spectrometry (MS) and antibody array analysis (MAP).

Morton NM, Beltram J, Carter RN et al. Genetic identification of thiosulfate sulfurtransferase as an adipocyte-expressed antidiabetic target in mice selected for leanness. Nat. Med. 2016-06-06 [PMID: 27270587]

Salem AF, Howell A, Sartini M. Downregulation of stromal BRCA1 drives breast cancer tumor growth via upregulation of HIF-1 alpha, autophagy and ketone body production. Cell Cycle. 2012-11-01 [PMID: 23047605] (WB, Human)



## Procedures

### Western Blot protocol specific for SDHB antibody (NBP1-

SDHB Antibody:

Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 40 ug of total protein per lane.
2. Transfer proteins to membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain according to standard Ponceau S procedure (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot.
5. Block the membrane using standard blocking buffer for at least 1 hour.
6. Wash the membrane in wash buffer three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate 1 hour at room temperature.
8. Wash the membrane in wash buffer three times for 10 minutes each.
9. Apply the diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturers instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions.

\*Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%.

### Immunohistochemistry-Paraffin protocol for SDHB Antibody (NBP1-54154)

SDHB Antibody:

Immunohistochemistry-Paraffin Embedded Sections

Antigen Unmasking:

Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

Staining:

1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in wash buffer for 5 minutes.
3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9. Wash sections three times in wash buffer for 5 minutes each.
10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
11. As soon as the sections develop, immerse slides in deionized water.
12. Counterstain sections in hematoxylin.
13. Wash sections in deionized water two times for 5 minutes each.
14. Dehydrate sections.
15. Mount coverslips.

**Immunocytochemistry/Immunofluorescence protocol for SDHB Antibody (NBP1-54154)**

SDHB Antibody:

Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and add 10% formalin to the dish. Fix at room temperature for 30 minutes.
2. Remove the formalin and add ice cold methanol. Incubate for 5-10 minutes.
3. Remove methanol and add washing solution (i.e. PBS). Be sure to not let the specimen dry out. Wash three times for 10 minutes.
4. To block nonspecific antibody binding incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
5. Add primary antibody at appropriate dilution and incubate at room temperature from 2 hours to overnight at room temperature.
6. Remove primary antibody and replace with washing solution. Wash three times for 10 minutes.
7. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
8. Remove antibody and replace with wash solution, then wash for 10 minutes. Add Hoechst 33258 to wash solution at 1:25,000 and incubate for 10 minutes. Wash a third time for 10 minutes.
9. Cells can be viewed directly after washing. The plates can also be stored in PBS containing Azide covered in Parafilm (TM). Cells can also be cover-slipped using Fluoromount, with appropriate sealing.

\*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.





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### **Products Related to NBP1-54154**

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NB800-PC2	Jurkat Whole Cell Lysate
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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### **Limitations**

This product is for research use only and is not approved for use in humans or in clinical diagnosis. Primary Antibodies are guaranteed for 1 year from date of receipt.

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