Product Datasheet

SAT1 Antibody - BSA Free
NB110-41622

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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Publications: 5

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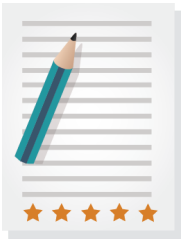
Updated 10/23/2024 v.20.1



NB110-41622

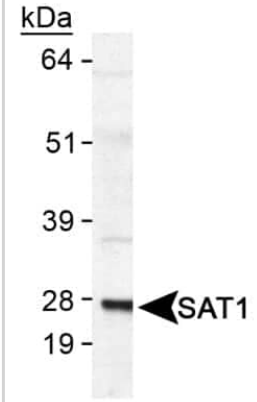
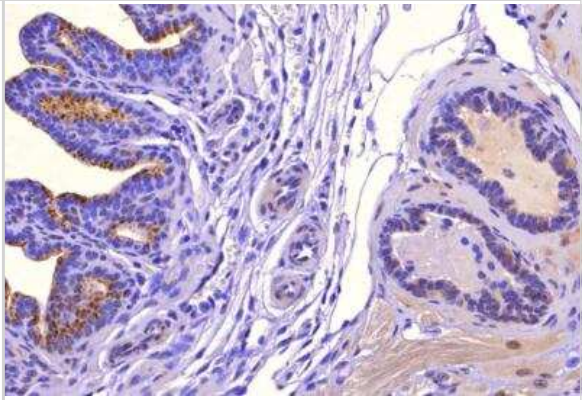
SAT1 Antibody - BSA Free

Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS
Target Molecular Weight	27 kDa

Product Description	
Host	Rabbit
Gene ID	6303
Gene Symbol	SAT1
Species	Human, Mouse, Rat, Porcine, Bovine, Chicken, Goat, Xenopus
Reactivity Notes	Immunogen displays the following percentage of sequence identity for non-tested species: Zebrafish (86%).
Immunogen	A synthetic peptide made to a C-terminal region within residues 100-171 of human SAT1. [Swiss-Prot# P21673]

Product Application Details	
Applications	Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1:500-1:1000, Immunohistochemistry 1:100, Immunohistochemistry-Paraffin 1:100
Application Notes	This SAT1 antibody is useful for Western Blot, and Immunohistochemistry paraffin embedded sections. In Western Blot analysis on transfected lysates a band is seen at ~27 kDa. In IHC-P, strong staining was observed in the cytoplasm with some weak nuclear staining in mouse seminal vesical and prostate tissue. Prior to immunostaining paraffin tissues, antigen retrieval with sodium citrate buffer (pH 6.0) is recommended. The observed molecular weight of the protein may vary from the listed predicted molecular weight due to post translational modifications, post translation cleavages, relative charges, and other experimental factors.

Images

Western Blot: SAT1 Antibody [NB110-41622] - Detection of SAT1 in human SAT1 transfected lysate.	
Immunohistochemistry: SAT1 Antibody [NB110-41622] - IHC analysis of SAT1 in mouse seminal vesical (left) and prostate (right) usind DAB with hematoxylin counterstain,	

Publications

Mossmann D, Müller C, Park S et al. Arginine reprograms metabolism in liver cancer via RBM39 Cell 2023-09-26 [PMID: 37804830] (WB, Mouse, Human)

Fiches GN, Wu Z, Zhou D et al. Polyamine biosynthesis and eIF5A hypusination are modulated by the DNA tumor virus KSHV and promote KSHV viral infection PLOS Pathogens 2022-04-29 [PMID: 35486659] (Western Blot)

Tate PM, Mastrodomenico V, Mounce BC Ribavirin Induces Polyamine Depletion via Nucleotide Depletion to Limit Virus Replication Cell Rep 2019-09-03 [PMID: 31484073]

Lane DJR, Bae DH, Siafakas AR et al. Coupling of the polyamine and iron metabolism pathways in the regulation of proliferation: Mechanistic links to alterations in key polyamine biosynthetic and catabolic enzymes Biochim. Biophys. Acta 2018-05-16 [PMID: 29777905] (WB)

Liao C-P, Lasbury ME, Wang S-H et al. Pneumocystis Mediates Overexpression of Antizyme Inhibitor Resulting in Increased Polyamine Levels Apoptosis in Alveolar Macrophages. J Biol Chem;284(12):8174-8184. 2009-01-01 [PMID: 19158080] (WB, Rat)

Procedures

Western Blot protocol for SAT1 Antibody (NB110-41622)
SAT1 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%.

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

Immunohistochemistry protocol for SAT1 Antibody (NB110-41622)
SAT1 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 4 C.
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.

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Immunocytochemistry/Immunofluorescence protocol for SAT1 Antibody (NB110-41622)
SAT1 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 1:25,0000 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.

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Products Related to NB110-41622

NBL1-15698	SAT1 Overexpression Lysate
NB110-41622PEP	SAT1 Antibody Blocking Peptide
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control

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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