Product Datasheet

SR-BI Antibody
NB400-113

Unit Size: 0.1 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

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Reviews: 1 Publications: 46

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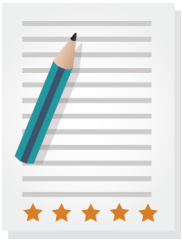
Updated 10/23/2024 v.20.1



NB400-113

SR-BI Antibody

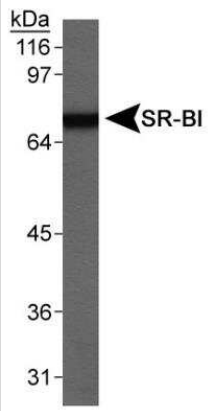
Product Information	
Unit Size	0.1 ml
Concentration	This product is unpurified. The exact concentration of antibody is not quantifiable.
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.05% Sodium Azide
Isotype	IgG
Purity	Unpurified
Buffer	Whole antisera

Product Description	
Host	Rabbit
Gene ID	949
Gene Symbol	SCARB1
Species	Human, Mouse, Rat
Immunogen	Adenovirus encoding mouse SR-BI. [UniProt# Q61009]

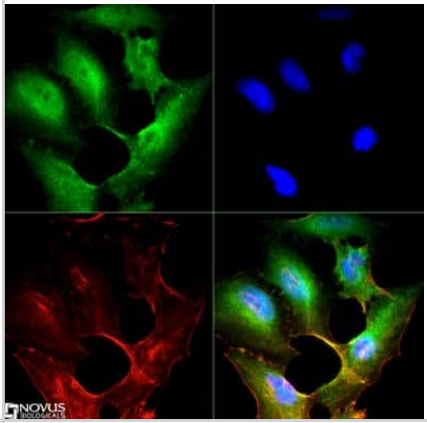
Product Application Details	
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Immunoprecipitation, Block/Neutralize
Recommended Dilutions	Western Blot 1:500, Flow Cytometry reported in scientific literature (PMID 22622498), Immunohistochemistry 1:100, Immunocytochemistry/ Immunofluorescence 1:50-1:200, Immunoprecipitation 1:100, Immunohistochemistry-Paraffin 1:100, Immunohistochemistry-Frozen reported in scientific literature, Block/Neutralize
Application Notes	This SR-BI antibody is useful for Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunoprecipitation, Western blot and for blocking the binding of ligands to SR-BI.

Images

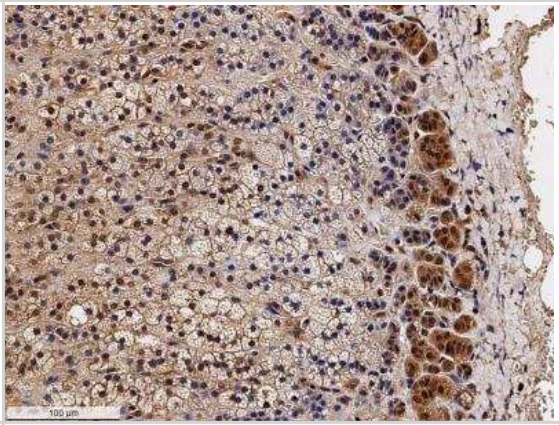
Western Blot: SR-BI Antibody [NB400-113] - Detection of SR-BI (80kDa) in mouse testis lysate total protein using NB400-113.



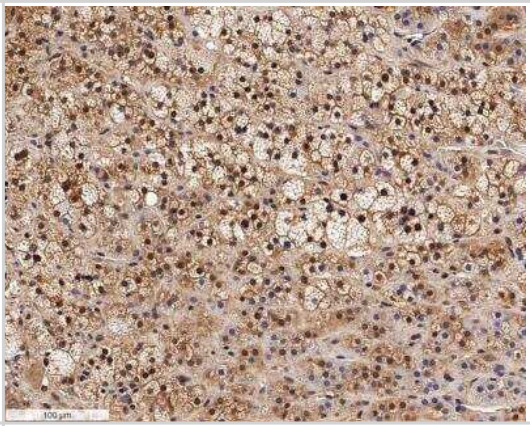
Immunocytochemistry/Immunofluorescence: SR-BI Antibody [NB400-113] - Antibody was tested in HeLa cells with DyLight 488 (green). Nuclei and alpha-tubulin were counterstained with DAPI (blue) and DyLight 550 (red).



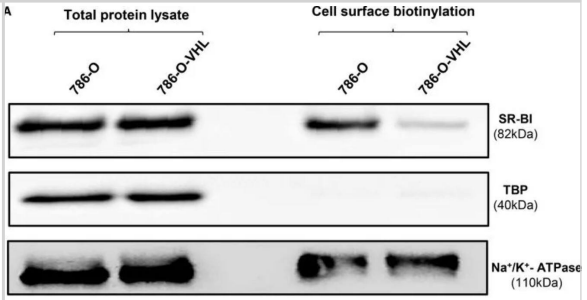
Immunohistochemistry-Paraffin: SR-BI Antibody [NB400-113] - Analysis of a FFPE section of human adrenal gland tissue using 1:100 dilution of SR-BI antibody. The staining was developed using HRP-DAB based detection method and the nuclei of the cells were counterstained with hematoxylin. This antibody generated a specific staining of SR-BI/SCARB1 in the glandular cells. The staining was membrane-cytoplasmic in the zona glomerulosa cells while the signal was primarily localized to the membranes of the cells in the zona fasciculata and zona reticularis layers of the adrenal cortex.



Immunohistochemistry-Paraffin: SR-BI Antibody [NB400-113] - Analysis of a FFPE section of human adrenal gland tissue using 1:100 dilution of SR-BI antibody. The staining was developed using HRP-DAB based detection method and the nuclei of the cells were counterstained using hematoxylin. The representative section shows SR-BI/SCARB1 positivity in the glandular cells and the staining was mainly localized to the membranes of the cells.



Western Blot: SR-BI Antibody [NB400-113] - Cell surface expression of SR-BI in renal carcinoma cells. Western blot analysis of SR-BI in total cell lysates (left) and on the cell surface (right) in 786-O and 786-O-VHL cells. The Western blots were probed with anti-SR-BI (82 kDa), anti-TBP (40 kDa, used as a control for intracellular protein expression), and anti-Na+/K+-ATPase (110 kDa, used as a control for cell surface protein expression). Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/30173145/) licensed under a CC-BY license.



Publications

Elizeth Lopes, Gisela Machado-Oliveira, Catarina Guerreiro Simões, Inês S Ferreira, Cristiano Ramos, José Ramalho, Maria I L Soares, Teresa M V D Pinho E Melo, Rosa Puertollano, André R A Marques, Otília V Vieira Cholesteryl Hemiazelate Present in Cardiovascular Disease Patients Causes Lysosome Dysfunction in Murine Fibroblasts. Cells 2023-12-25 [PMID: 38132146]

Islam MM, Umehara T, Tsujita N et al. Treatment with cholesterol just after thawing maintains the fertility of bull sperm Molecular human reproduction 2023-08-30 [PMID: 37656939] (ICC/IF, Bovine)

Al-Jarallah A, Babiker F. High Density Lipoprotein Reduces Blood Pressure and Protects Spontaneously Hypertensive Rats Against Myocardial Ischemia-Reperfusion Injury in an SR-BI Dependent Manner Frontiers in Cardiovascular Medicine 2022-03-21 [PMID: 35387446] (Block/Neutralize)

Castleberry M, Raby CA, Ifrim A et al. High-density lipoproteins mediate small RNA intercellular communication between dendritic cells and macrophages Journal of Lipid Research 2023-02-01 [PMID: 36626966] (Block/Neutralize)

Uppal S, Postnikova O, Villasmil R et al. Low-Density Lipoprotein Receptor (LDLR) Is Involved in Internalization of Lentiviral Particles Pseudotyped with SARS-CoV-2 Spike Protein in Ocular Cells International journal of molecular sciences 2023-07-24 [PMID: 37511618] (B/N)

Cipollari, E, Szapary, H J Et al. Correlates and Predictors of Cerebrospinal Fluid Cholesterol Efflux Capacity from Neural Cells, a Family of Biomarkers for Cholesterol Epidemiology in Alzheimer's Disease. J Alzheimers Dis 2020-02-18 [PMID: 32065798] (ICC/IF, Human)

Tenesaca S, Vasquez M, Fernandez-Sendin M Et Al. Scavenger Receptor class B type I is Required for 25-Hydroxycholecalciferol Cellular Uptake and Signaling in Myeloid Cells Mol Nutr Food Res 2020-06-25 [PMID: 32583974] (Human)

Rink JS, Lin A, McMahon KM et al. Targeted reduction of cholesterol uptake in cholesterol-addicted lymphoma cells blocks turnover of oxidized lipids to cause ferroptosis FASEB J 2020-11-16 [PMID: 33208460] (IF/IHC, Rat)

Velagapudi S, Schraml P et al. Scavenger receptor BI promotes cytoplasmic accumulation of lipoproteins in clear-cell renal cell carcinoma. J Lipid Res 2018-01-11 [PMID: 30173145] (Neut, Human)

Yvan-Charvet L, Bobard A et al. In vivo evidence for a role of adipose tissue SR-BI in the nutritional and hormonal regulation of adiposity and cholesterol homeostasis. Arterioscler Thromb Vasc Biol 2007-01-06 [PMID: 17363694] (WB, Mouse)

Langlois AC, Manzoni G, Vincensini L et al. Molecular determinants of SR-B1-dependent Plasmodium sporozoite entry into hepatocytes Sci Rep 2020-08-11 [PMID: 32782257] (ICC/IF)

Robert J, Button EB, Martin EM et al. Cerebrovascular amyloid Angiopathy in bioengineered vessels is reduced by high-density lipoprotein particles enriched in Apolipoprotein E Mol Neurodegener 2020-03-25 [PMID: 32213187]

More publications at http://www.novusbio.com/NB400-113

Procedures

Blocking/Neutralizing Protocol for SR-BI Antibody (NB400-113)

Blocking Protocol

1) Transfect 293 cells or Cos cells or any easily transfectable cell line with SR-BI.

2) Next day, add DMEM with 0.2% BSA to the media plus 1:500 dilution (or 1:1000) dilution of the SR-BI blocking ab. Incubate for 30 minutes to 1 hour at 37 deg C.

3) Add 1 to 10ug/ml of radiolabeled or fluorescent HDL (labeled either on the lipid or protein) to cells for 1 to 2 hours (in the presence of the blocking antibody). For control cells, do not add blocking antibody.

4) Wash cells 3 to 4 times with ice cold PBS.

5) Measure HDL uptake by appropriate method (depending on label on HDL).

Note: As a positive control, you can add an excess (100-fold more) of unlabeled HDL to cells together with the label. This should block the uptake of labeled HDL by 80% or more. This positive control should tell you that your cells are expressing functional SR-BI. Also, cells not receiving either unlabeled HDL or no blocking ab should tell you that your cells are expressing functional SR-BI.

Western Blot protocol for SR-BI Antibody (NB400-113)

Western Blot Protocol
1. Perform SDS-PAGE on samples to be analyzed, loading 30 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 anti-SR-BI rabbit 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%.

Immunocytochemistry/Immunofluorescence protocol for SR-BI Antibody (NB400-113)

Immunocytochemistry Protocol

Culture cells to appropriate density on suitable glass coverslips 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 5-10 minutes.
2. Remove the formalin and add 0.5% Triton-X 100 in TBS to permeabilize the cells. Incubate for 5-10 minutes.
3. Remove the permeabilization buffer and add wash buffer (i.e. PBS or PBS with 0.1% Tween-20). Be sure to not let the specimen dry out. Gently wash three times for 10 minutes.
4. Alternatively, cells can be fixed with -20C methanol for 10 min at room temperature. Remove the methanol and rehydrate in PBS for 10 min before proceeding.
5. To block nonspecific antibody binding incubate in 10% normal goat serum for 1 hour at room temperature.
6. Add primary antibody at appropriate dilution and incubate at room temperature for 1 hour or at 4 degrees C overnight.
7. Remove primary antibody and replace with wash buffer. Gently wash three times for 10 minutes.
8. Add secondary antibody at the appropriate dilution. Incubate for 1 hour at room temperature.
9. Remove antibody and replace with wash buffer. Gently wash three times for 10 minutes.
10. Nuclei can be staining with 4',6' diamino phenylindole (DAPI) at 0.1 ug/ml, or coverslips can be directly mounted in media containing DAPI.
11. Cells can now be viewed with a fluorescence microscope.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow proper laboratory procedures for the disposal of formalin.

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Products Related to NB400-113

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
NB400-101PEP	SR-BI Antibody Blocking Peptide

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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