

**Product datasheet** 

# Anti-Scavenging Receptor SR-BI antibody [EPR20190] ab217318

KO VALIDATED Recombinant RabMAb

Properties

\*\*\*\*\* 2 Abreviews 35 References 14 Images

Overview						
Product name	Anti-Scavenging Receptor SR-BI antibody [EPR20190]					
Description	Rabbit monoclonal [EPR20190] to Scavenging Receptor SR-BI					
Host species	Rabbit					
Tested applications	Suitable for: WB, IHC-P, ICC/IF, IP					
Species reactivity	Reacts with: Mouse, Rat, Human					
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.					
Positive control	WB: Human fetal liver lysate; Mouse liver, heart, kidney and spleen lysates; Rat liver lysate; U937, LNCaP, PC-3, THP-1, HepG2, C6, RAW 264.7, PC-12 and NIH/3T3 whole cell lysates. IHC-P: Human liver, diffuse large B cell lymphoma and hepatocellular carcinoma tissues; Mouse liver tissue; Rat liver and cerebral cortex tissues. ICC/IF: HepG2 cells. IP: Human fetal liver lysate.					
General notes	<ul> <li>This product is a recombinant monoclonal antibody, which offers several advantages including:</li> <li>High batch-to-batch consistency and reproducibility</li> <li>Improved sensitivity and specificity</li> <li>Long-term security of supply</li> <li>Animal-free production</li> <li>For more information <u>see here</u>.</li> <li>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <u>RabMAb<sup>®</sup> patents</u>.</li> </ul>					

Form	Liquid					
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.					
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: 59% PBS, 40% Glycerol, 0.05% BSA					
Purity	Protein A purified					

Clonality	Monoclonal			
Clone number	EPR20190			
lsotype	lgG			

# Applications

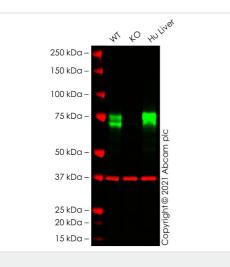
The Abpromise guarantee Our <u>Abpromise guarantee</u> covers the use of ab217318 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB	★★★★★ <u>(1)</u>	1/2000. Detects a band of approximately 82 kDa (predicted molecular weight: 60 kDa).
IHC-P		1/1000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/100.
IP		1/30.

Target					
Function	Receptor for different ligands such as phospholipids, cholesterol ester, lipoproteins, phosphatidylserine and apoptotic cells. Probable receptor for HDL, located in particular region of the plasma membrane, called caveolae. Facilitates the flux of free and esterified cholesterol between the cell surface and extracellular donors and acceptors, such as HDL and to a lesser extent, apoB-containing lipoproteins and modified lipoproteins. Probably involved in the phagocytosis of apoptotic cells, via its phosphatidylserine binding activity. Receptor for hepatitis C virus glycoprotein E2. Binding between SCARB1 and E2 was found to be independent of the genotype of the viral isolate. Plays an important role in the uptake of HDL cholesteryl ester.				
Tissue specificity	Widely expressed.				
Sequence similarities	Belongs to the CD36 family.				
Post-translational modifications	N-glycosylated.				
Cellular localization	Cell membrane. Membrane > caveola. Predominantly localized to cholesterol and sphingomyelin- enriched domains within the plasma membrane, called caveolae.				

Images



Western blot - Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318)

All lanes : Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318) at 1/2000 dilution

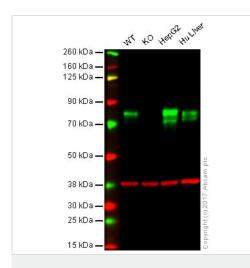
Lane 1 : Wild-type HEK-293T cell lysate Lane 2 : SCARB1 knockout HEK-293T cell lysate Lane 3 : Human Liver cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 60 kDa Observed band size: 70,75 kDa

False colour image of Western blot: Anti-Scavenging Receptor SR-BI antibody [EPR20190] staining at 1/2000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (ab8245) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab217318 was shown to bind specifically to Scavenging Receptor SR-BI. A band was observed at 70/75 kDa in wild-type HEK-293T cell lysates with no signal observed at this size in SCARB1 knockout cell line ab282646 (knockout cell lysate ab283046). To generate this image, wild-type and SCARB1 knockout HEK-293T cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween<sup>®</sup> 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed (ab216776) at 1/20000 dilution



Western blot - Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318)

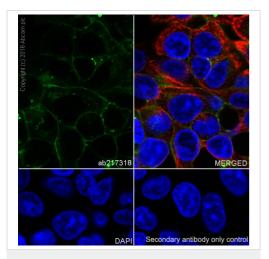
Lane 1: Wild-type HAP1 whole cell lysate (20 µg) Lane 2: Scavenging Receptor SR-BI knockout HAP1 whole cell lysate (20 µg)

Lane 3: HepG2 whole cell lysate (20  $\mu$ g)

Lane 4: Human liver whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab217318 observed at 80 kDa. Red - loading control, <u>ab9484</u>, observed at 37 kDa.

ab217318 was shown to specifically react with Scavenging Receptor SR-BI in wild-type HAP1 cells as signal was lost in Scavenging Receptor SR-BI knockout cells. Wild-type and Scavenging Receptor SR-BI knockout samples were subjected to SDS-PAGE. Ab217318 and <u>ab9484</u> (Mouse anti-GAPDH loading control) were incubated overnight at 4°C at 1/2000 dilution and 1/20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye<sup>®</sup> 800CW) preabsorbed <u>ab216773</u> and Goat anti-Mouse IgG H&L (IRDye<sup>®</sup> 680RD) preabsorbed <u>ab216776</u> secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.

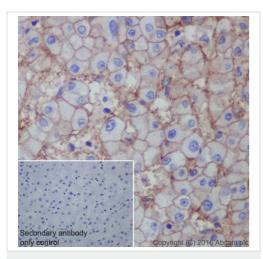


Immunocytochemistry/ Immunofluorescence - Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318)

Immunofluorescent analysis of 100% methanol fixed HepG2 (Human liver hepatocellular carcinoma cell line) cells labeling Scavenging Receptor SR-BI with ab217318 at 1/100 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor<sup>®</sup> 488) (<u>ab150077</u>) secondary antibody at 1/1000 dilution (green). Confocal image showing membranous staining on HepG2 cell line.

The nuclear counter stain is DAPI (blue). Tubulin is detected with <u>ab195889</u> (Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor<sup>®</sup> 594)) at 1/200 dilution (red).

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat anti-rabbit IgG (Alexa Fluor<sup>®</sup> 488) (**ab150077**) at 1/1000 dilution.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318) Immunohistochemical analysis of paraffin-embedded human liver tissue labeling Scavenging Receptor SR-BI with ab217318 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous staining on human liver is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

	1	2	3		4	5	6
250 kDa 🗕				250 kDa 🗕			
50 kDa 🗕				150 kDa 🗕			
00 kDa 🗕							
75 kDa 🗕	_	-	-	100 kDa 🗕	_	_	-
(J NDa —	-	-		75 kDa 🗕	-	-	-
50 kDa 🗕				50 kDa 🗕			
37 kDa 🗕				37 kDa 🗕			
25 kDa 🗕				25 kDa 🗕			
20 KDa -				20 kDa 🗕			
20 kDa 🗕				North Control of Contr			
altered and				15 kDa 🗕			
15 kDa 🗕							
10 kDa 🗕				10 kDa 🗕			

Western blot - Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318) All lanes : Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318) at 1/2000 dilution

- Lane 1 : Human fetal liver lysate at 20 µg
- Lane 2 : Mouse liver lysate at 20 µg
- Lane 3 : Rat liver lysate at 20  $\mu g$
- Lane 4 : Mouse heart lysate at 10 µg
- Lane 5 : Mouse kidney lysate at 10  $\mu$ g
- Lane 6 : Mouse spleen lysate at 10 µg

#### Secondary

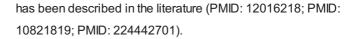
All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

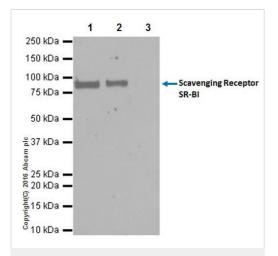
Predicted band size: 60 kDa Observed band size: 82 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

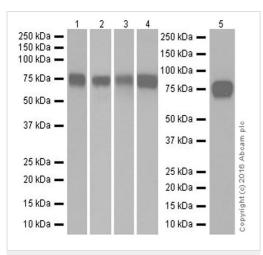
Exposure times: Lane 1-3: 4 seconds; Lane 4-6: 3 minutes.

Scavenging Receptor SR-BI undergoes N-glycosylation when it is expressed. The molecular weight observed is consistent with what





Immunoprecipitation - Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318)



Western blot - Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318) Scavenging Receptor SR-BI was immunoprecipitated from 0.35 mg of Human fetal liver lysate with ab217318 at 1/30 dilution. Western blot was performed from the immunoprecipitate using ab217318 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (<u>ab131366</u>), was used for detection at 1/10000 dilution.

Lane 1: Human fetal liver lysate, 10 µg (Input).

Lane 2: ab217318 IP in Human fetal liver lysate.

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab217318 in Human fetal liver lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 30 seconds.

All lanes : Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318) at 1/2000 dilution

Lane 1 : U937 (Human histiocytic lymphoma cell line) whole cell lysate

Lane 2 : LNCaP (Human prostate cancer cell line) whole cell lysate Lane 3 : PC-3 (Human prostate adenocarcinoma cell line) whole cell lysate

Lane 4 : THP-1 (Human monocytic leukemia cell line) whole cell lysate

Lane 5 : HepG2 (Human liver hepatocellular carcinoma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

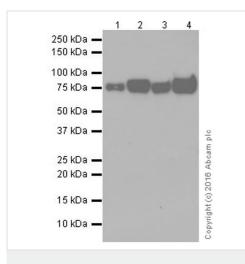
### Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 60 kDa Observed band size: 82 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure times: Lane 1: 30 seconds; Lane 2: 4 seconds; Lane 3: 2



Western blot - Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318)

All lanes : Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318) at 1/2000 dilution

Lane 1 : C6 (Rat glial tumor cell line) whole cell lysate Lane 2 : RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate Lane 3 : PC-12 (Rat adrenal gland pheochromocytoma cell line) whole cell lysate

Lane 4 : NIH/3T3 (Mouse embryonic fibroblast cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

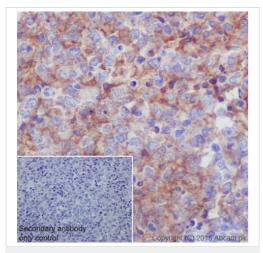
## Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

Predicted band size: 60 kDa Observed band size: 82 kDa

Exposure time: 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

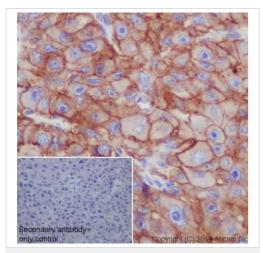


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318)

Immunohistochemical analysis of paraffin-embedded human diffuse large B cell lymphoma tissue labeling Scavenging Receptor SR-BI with ab217318 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous and cytoplasmic staining on human diffuse large B cell lymphoma is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

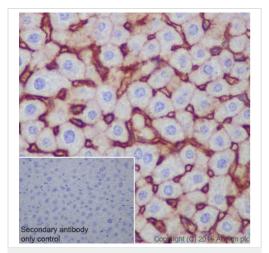


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318)

Immunohistochemical analysis of paraffin-embedded human hepatocellular carcinoma tissue labeling Scavenging Receptor SR-BI with ab217318 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous staining on human hepatocellular carcinoma is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

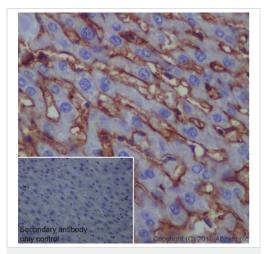


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318)

Immunohistochemical analysis of paraffin-embedded mouse liver tissue labeling Scavenging Receptor SR-BI with ab217318 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous staining on mouse liver is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

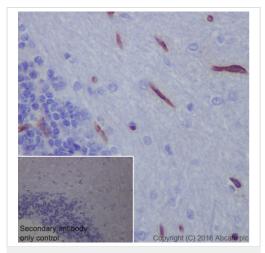


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318)

Immunohistochemical analysis of paraffin-embedded rat liver tissue labeling Scavenging Receptor SR-BI with ab217318 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous and cytoplasmic staining on rat liver is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Scavenging Receptor SR-BI antibody [EPR20190] (ab217318)



Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

#### Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <u>https://www.abcam.com/abpromise</u> or contact our technical team.

Immunohistochemical analysis of paraffin-embedded rat cerebral cortex tissue labeling Scavenging Receptor SR-BI with ab217318 at 1/1000 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) Ready to use. Membranous and cytoplasmic staining on rat cerebral cortex blood vessel endothelium is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) Ready to use.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

# Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors