Product Datasheet

Hepatic Sinusoidal Endothelial Cells Antibody (SE-1) - BSA Free

NB110-68095

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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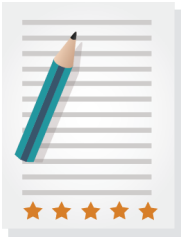
Updated 2/21/2025 v.20.1



NB110-68095

Hepatic Sinusoidal Endothelial Cells Antibody (SE-1) - BSA Free

Product Information

Unit Size	0.1 ml
Concentration	1 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	SE-1
Preservative	0.02% Sodium Azide
Isotype	IgG2a Kappa
Purity	Protein A purified
Buffer	PBS

Product Description

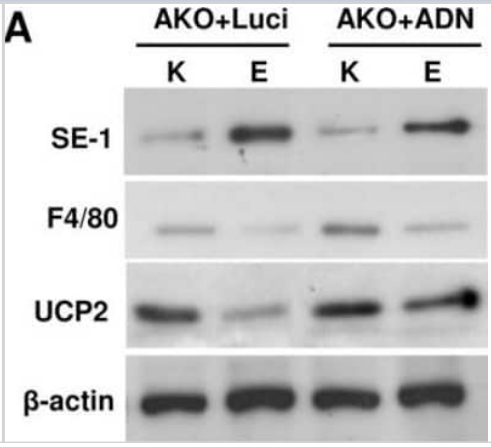
Host	Mouse
Species	Human, Mouse, Rat
Immunogen	Rat Hepatic Sinusoidal Endothelial Cells

Product Application Details

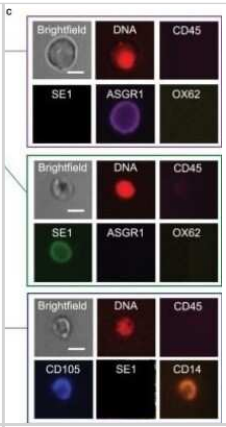
Applications	Western Blot, Flow Cytometry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 1-5 ug/ml, Flow Cytometry reported in scientific literature (PMID 9428229), Immunohistochemistry 1-5 ug/ml, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin 1-5 ug/ml, Immunohistochemistry-Frozen 1-5 ug/ml
Application Notes	In WB, Hepatic Sinusoidal Endothelial Cells antibody (clone SE-1) generates a specific band around 45-50 kDa molecular weight position. For IHC use neutral buffered formalin fixated (perfusion fixation is recommended) paraffin embedded tissues after proteinase K treatment or acetone fixed frozen sections.

Images

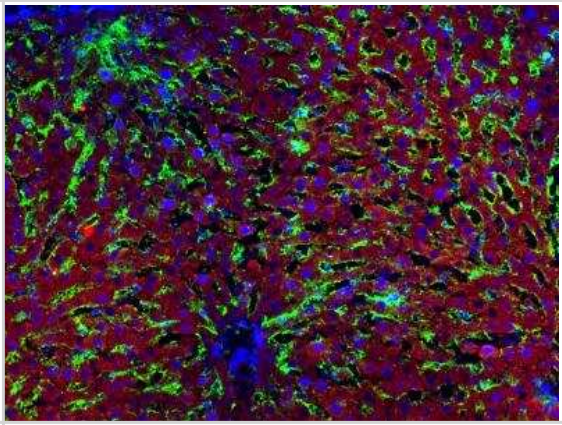
Western Blot: Hepatic Sinusoidal Endothelial Cells Antibody (SE-1) [NB110-68095] - Adiponectin promotes UCP2 expression in hepatic endothelial cells.AKO mice were treated as in Figure 1B. The NPCs were used for further fractionation to collect those enriched with Kupffer (K)- and sinusoidal endothelial cells. The enrichment of the two cell types were confirmed by Western blotting using macrophage marker F4/80 and sinusoidal endothelial marker SE-1, respectively. UCP2 expression was monitored as in Figure 1. After densitometry analysis, the protein ratio of UCP2/beta-actin was calculated and presented as fold changes against Luci Kupffer samples. Image collected and cropped by CiteAb from the following publication (https://dx.plos.org/10.1371/journal.pone.0032349), licensed under a CC-BY license.



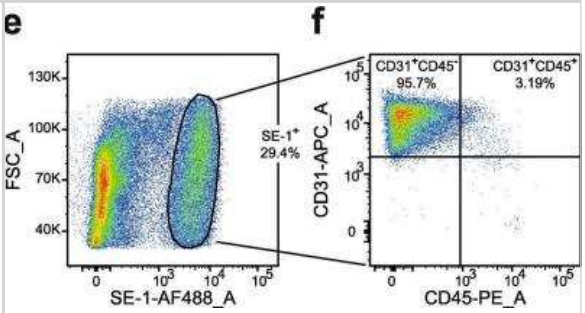
Immunocytochemistry/Immunofluorescence: Hepatic Sinusoidal Endothelial Cells Antibody (SE-1) [NB110-68095] - Release of structural liver cells into the perfusate after cold ischemia. Representative images of surface marker expression of hepatocytes (top), LSEC (middle), and stellate cells (below). Scale bars: 5 um. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/articles/s41598-020-57589-4), licensed under a CC-BY license.



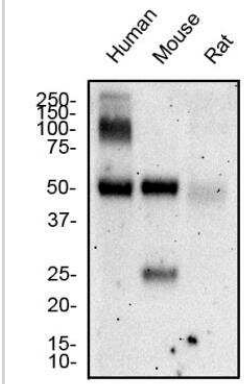
Immunohistochemistry-Frozen: Hepatic Sinusoidal Endothelial Cells Antibody (SE-1) [NB110-68095] - Frozen rat liver tissue sections. DAPI (blue), SE1 (green), cytochrome P450 (red). Tissue sections were acetone fixed. SE1 antibody at 1:500, incubated at 4C overnight. Multiplexed with cytochrome P450 from another vendor. IHC-Fr image submitted by a verified customer review.



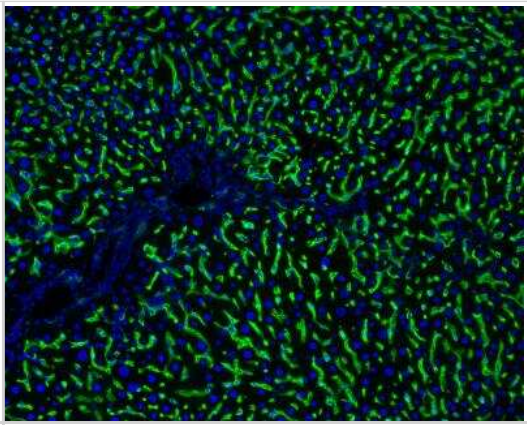
Flow Cytometry: Hepatic Sinusoidal Endothelial Cells Antibody (SE-1) [NB110-68095] - Representative sequential gating during flow cytometry analysis of rat non-parenchymal liver cells (n = 4). Cells were labeled with antibodies to SE-1 (NB110-68095AF488), CD31, and CD45 (NB100 -64895PE). LSECs were then identified as SE-1-Alexa488+ cells (e), and the biexponential CD45-PE/CD31-APC of events (f) were used to display and select the CD45+ CD31+ subsets of LSECs. FMOs (used for gating), and single antibody staining controls are shown in Additional file. Image collected and cropped by CiteAb from the following publication (//pubmed.ncbi.nlm.nih.gov/33246411/) licensed under a CC-BY license.



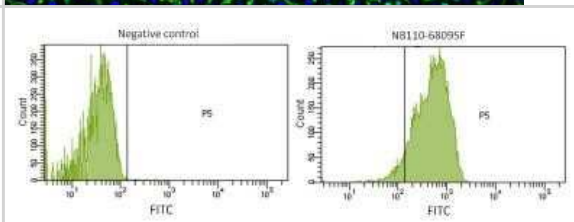
Western Blot: Hepatic Sinusoidal Endothelial Cells Antibody (SE-1) [NB110-68095] - Total protein from human, mouse and rat liver was separated on a 12% gel by SDS-PAGE, transferred to PVDF membrane and blocked in 5% non-fat milk in TBST. The membrane was probed with 2.0 ug/ml anti-H.S.E.C in 1% non-fat milk in TBST and detected with an anti-mouse HRP secondary antibody using chemiluminescence.



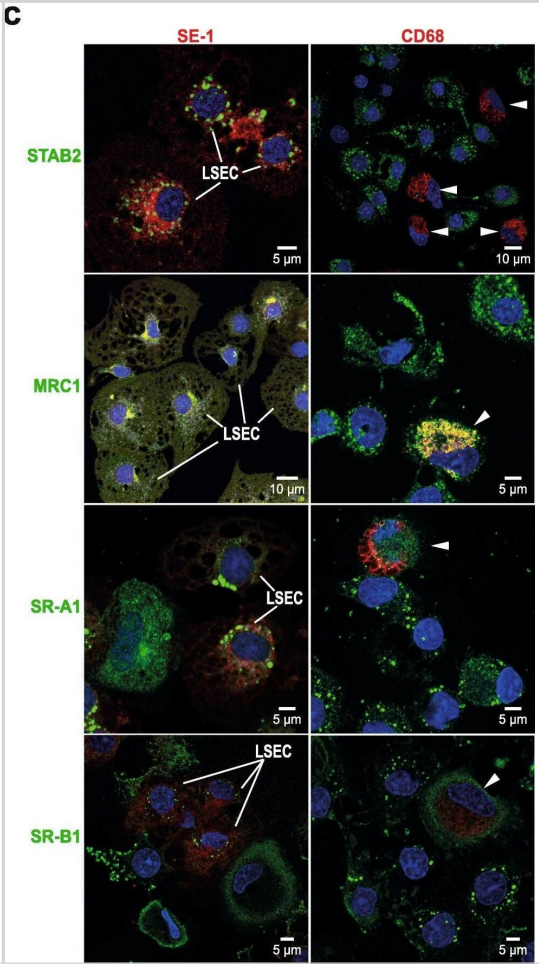
Immunohistochemistry-Frozen: Hepatic Sinusoidal Endothelial Cells Antibody (SE-1) [NB110-68095] - Analysis of frozen normal rat liver tissue sections using anti-Hepatic Sinusoidal Endothelial Cells antibody (green). Nuclei were counterstained with DAPI (blue). Image from verified customer review.



Flow Cytometry: Hepatic Sinusoidal Endothelial Cells Antibody (SE-1) [NB110-68095] - Using the FITC direct conjugate Flow Cytometry: Surface staining of Rat Liver sinusoidal endothelial cells with Mouse anti-Rat Hepatic Sinusoidal Endothelial Cells [FITC] [NB110-68095F] and negative control. Total viable cells were used for analysis. Image courtesy of customer.



Immunocytochemistry/ Immunofluorescence: Hepatic Sinusoidal Endothelial Cells Antibody (SE-1) [NB110-68095] - Expression of scavenger receptors & immune lectins in rat LSECs & KCs. a. Unscaled heatmaps of normalized log2 expression values (log2 (RPKM+ 1), & log2 (iBAQ+ 1)) for scavenger receptors (SR) & C-type lectins in the KC & LSEC transcriptomes & proteomes. Underlined: Genes expressed in the transcriptome that were also present in the proteome. b. Absolute abundance of selected SR gene products in the KC & LSEC transcriptomes & proteomes. The bar height reflects good correlation between the transcriptome & proteome data for gene products of Clec4g, Clec4m, Stab1, & Stab2 in both cell types. The abundance of gene products of Marco & Cd5l were well correlated between the KC transcriptome & proteome, while LSECs showed high abundance of these gene products only at mRNA level. c. Immune labeling of non-parenchymal liver cell (NPC) cultures for selected SRs & C-type lectins. NPCs from the 25–45% interface on the Percoll gradient were incubated for 1 h, then fixed 15 min in 4% paraformaldehyde, & double immune-labeled with antibodies to FcγRIIb2 (SE-1; red fluorescence; left column), or CD68 (red fluorescence; right column), & to either stabilin-2 (STAB2; green), mannose receptor (MRC1; green), SR-A1 (green), or SR-B1 (green). Overlap of green & red fluorescence is seen as yellow staining in the overlay images. Antibodies are listed in Table 1. Cell nuclei were stained with DAPI (blue). Arrow heads point to CD68 positive KCs. Antibodies to stabilin-2 & FcγRIIb2 (SE-1) specifically labeled LSECs & the CD68-antibody specifically labeled KCs, whereas positive labeling for the mannose receptor, SR-A1, & SR-B1 was observed in both LSECs & KCs Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/33246411), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Jensen B, Elfwing M, Elsey RM et al. Coronary blood flow in the anesthetized American alligator (Alligator mississippiensis). Comparative biochemistry and physiology. Part A, Molecular & integrative physiology 2016-09-12 [PMID: 26436857]

Gil M, Khouri L, Raurell I et al. Optimization of Statin-Loaded Delivery Nanoparticles for Treating Chronic Liver Diseases by Targeting Liver Sinusoidal Endothelial Cells Pharmaceutics 2023-10-14 [PMID: 37896223] (Immunohistochemistry, Rat)

Tian C, Li L, Fan L et al. A hepatoprotective role of peritumoral non-parenchymal cells in early liver tumorigenesis Disease models & mechanisms 2023-02-02 [PMID: 36728410]

Kai Y, Yan W, Xiaoxia C et al Neutralizing serum amyloid a protects against sinusoidal endothelial cell damage and platelet aggregation during acetaminophen-induced liver injury Biochemical and Biophysical Research Communications 2023-01-01 [PMID: 36463757]

Bhandari, S, Li, R Et al. Transcriptome and proteome profiling reveal complementary scavenger and immune features of rat liver sinusoidal endothelial cells and liver macrophages. BMC Mol Cell Biol 2020-11-27 [PMID: 33246411] (IF/IHC, Human)

Zhang R, Liu S, Ma Z et al. Effect of Qizhu Granule on Liver Sinusoidal Endothelial Cells Capillarization in Carbon Tetrachloride-Induced Rats Fibrosis. Research Square 2020-09-17 (WB, Rat)

Nakura M, Miyashita T, Yamamoto Y et al. Inhibitory Effects of Beraprost Sodium in Murine Hepatic Sinusoidal Obstruction Syndrome Anticancer Res. 2020-09-01 [PMID: 32878805] (IF/IHC, Mouse)

Kanou S, Miyashita T, Yamamoto Y et al. Prophylactic Effect of Recombinant Human Soluble Thrombomodulin for Hepatic Sinusoidal Obstruction Syndrome Model Mice In Vivo 2020-12-22 [PMID: 32354890] (IF/IHC, Mouse)

Maruyama S, Kono H, Furuya S et al. Platelet c-type lectin-like receptor reduces cholestatic liver injury in mice Am. J. Pathol. 2020-05-28 [PMID: 32473917]

de Vries RJ, Pendexter CA, Cronin SEJ et al. Cell release during perfusion reflects cold ischemic injury in rat livers Sci Rep. [PMID: 31980677] (FLOW, Rat)

Serra Monica, Marongiu Michela, Contini Antonella et al. Evidence of Amniotic Epithelial Cell Differentiation toward Hepatic Sinusoidal Endothelial Cells. Cell Transplantation 2018-03-22 [PMID: 29562778] (ICC/IF, IF/IHC, Rat)

Oldani G, Peloso A, Vijgen S et al. Chimeric liver transplantation reveals interspecific graft remodelling. J. Hepatol. 2018-07-19 [PMID: 30031887] (ICC/IF, Mouse)

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