Product Datasheet

Serpin A1/alpha 1-Antitrypsin Antibody - BSA Free
NBP1-90309

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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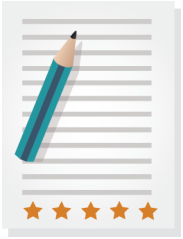
Publications: 8

Protocols, Publications, Related Products, Reviews, Research Tools and Images at:
www.novusbio.com/NBP1-90309

Updated 12/2/2025 v.20.1



NBP1-90309

Serpin A1/alpha 1-Antitrypsin Antibody - BSA Free

Product Information

Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
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	Affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol

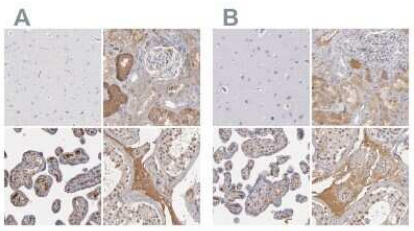
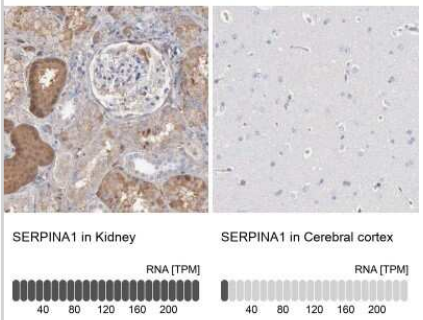
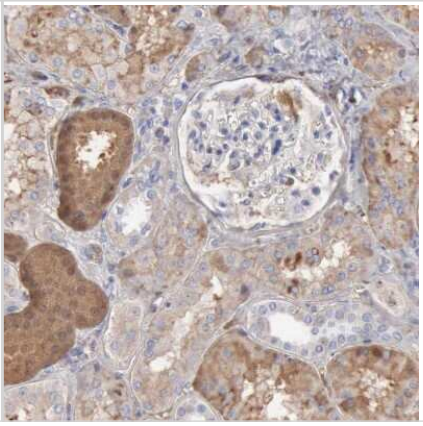
Product Description

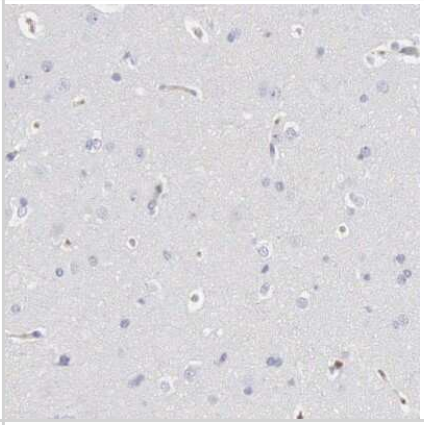
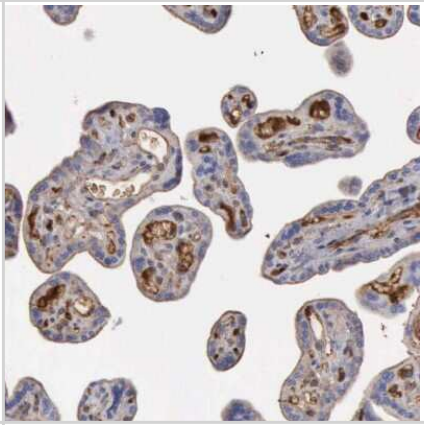
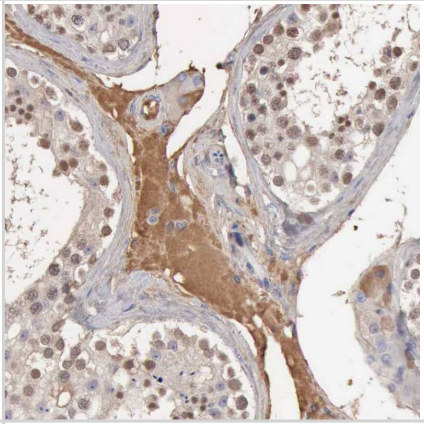
Description	Novus Biologicals Rabbit Serpin A1/alpha 1-Antitrypsin Antibody - BSA Free (NBP1-90309) is a polyclonal antibody validated for use in IHC, WB, ICC/IF and Simple Western. Anti-Serpin A1/alpha 1-Antitrypsin Antibody: Cited in 8 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	5265
Gene Symbol	SERPINA1
Species	Human
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: HDQDHPTFNKITPNLAEFAFSLYRQLAHQSNSTNIFFSPVSIATAFAMLSLGTKA DTHDEILEGLNFNLTEIPEAQIHEGFQELLRTLNQPDSQLQLTTGNGLFLSEGLK LVDKFLEDVKKLYHSEAFTVNFGDTEEAKKQINDYGAPHR

Product Application Details

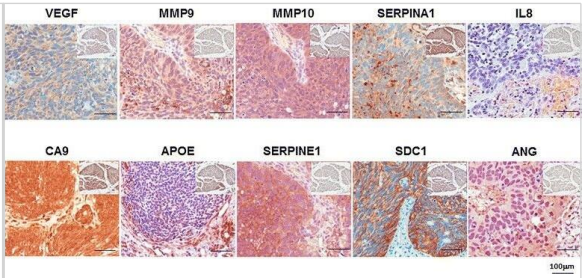
Applications	Western Blot, Simple Western, Immunohistochemistry-Paraffin, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry
Recommended Dilutions	Western Blot 0.04-0.4 ug/ml, Simple Western 1:125, Immunohistochemistry 1:2500 - 1:5000, Immunocytochemistry/ Immunofluorescence 0.25-2 ug/ml, Immunohistochemistry-Paraffin 1:2500-1:5000
Application Notes	For IHC-Paraffin, HIER pH 6 retrieval is recommended. ICC/IF Fixation Permeabilization: Use PFA/Triton X-100. See Simple Western Antibody Database for Simple Western validation: Human fibroblast lysates from Alpha-1-antitrypsin deficiency (AATD) and normal patients as samples; separated by size; antibody dilution of 1:125; detected by Chemiluminescence.

Images

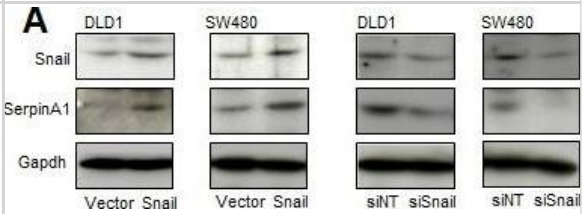
Immunocytochemistry/Immunofluorescence: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Staining of human cell line Hep G2 shows localization to vesicles. Antibody staining is shown in green.	
Immunohistochemistry-Paraffin: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Staining of human cerebral cortex, kidney, placenta and testis using Anti-SERPINA1 antibody NBP1-90309 (A) shows similar protein distribution across tissues to independent antibody NBP1-90308 (B).	
Immunohistochemistry-Paraffin: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Analysis in human kidney and cerebral cortex tissues using NBP1-90309 antibody. Corresponding SERPINA1 RNA-seq data are presented for the same tissues.	
Immunohistochemistry-Paraffin: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Staining of human kidney shows moderate positivity in plasma.	

Immunohistochemistry-Paraffin: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Staining of human cerebral cortex shows no positivity in neurons as expected.	
Immunohistochemistry-Paraffin: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Staining of human placenta shows strong positivity in plasma in blood vessels.	
Staining of human testis shows moderate positivity in plasma.	
Serpin-A1-alpha-1-Antitrypsin-Antibody-Immunohistochemistry-NBP1-90309-img0031.jpg	

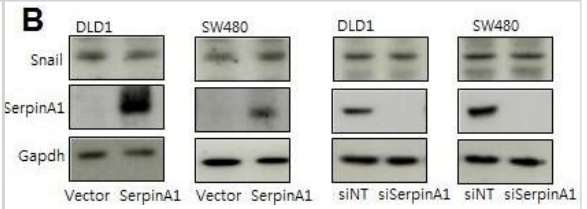
Immunohistochemistry: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Representative expression status for ANG, CA9, MMP9, MMP10, SERPINA1, APOE, SDC1, VEGFA, serpine1 & IL8 levels in tumor tissue.Insert Representative expression status for ANG, CA9, MMP9, MMP10, SERPINA1, APOE, SDC1, VEGFA, serpine1 & IL-8 levels in benign tissue. All images were captured at 400× magnification. Image collected & cropped by CiteAb from the following publication (https://diagnosticpathology.biomedcentral.com/articles/10.1186/s13000-014-0200-1), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

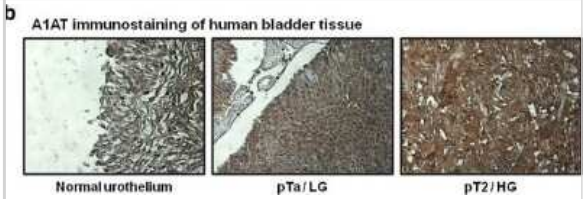
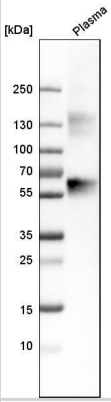
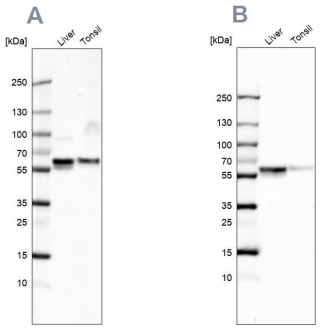


Western Blot: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - SerpinA1 was regulated by SnailA. DLD-1 & SW480 cells were transfected with pcDNA-Snail (Snail), control vector pcDNA (vector), Snail siRNA (siSnail), or nontargeting siRNA (siNT), & Snail & serpinA1 protein levels were evaluated by western blot analysis. B. DLD-1 & SW480 cells were transfected with pcDNA-serpinA1 (serpinA1), control vector pcDNA (vector), serpinA1 siRNA (siSerpinA1), or nontargeting siRNA (siNT), & western blot analysis was performed for detection of Snail & SerpinA1 expression. C. DLD-1 & SW480 cells were transfected with pcDNA-Snail (Snail) or control vector pcDNA (vector), & ChIP assays were performed. The presence of the serpinA1 promoter (−516/−4) was verified in immunoprecipitates with either mouse IgG or anti-Snail antibodies, & assay inputs were analyzed using real-time PCR. The samples were loaded on agarose gels. D. Data show promoter enrichment in the anti-Snail immunoprecipitate relative to IgG. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/26015410), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Western Blot: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - SerpinA1 was regulated by SnailA. DLD-1 & SW480 cells were transfected with pcDNA-Snail (Snail), control vector pcDNA (vector), Snail siRNA (siSnail), or nontargeting siRNA (siNT), & Snail & serpinA1 protein levels were evaluated by western blot analysis. B. DLD-1 & SW480 cells were transfected with pcDNA-serpinA1 (serpinA1), control vector pcDNA (vector), serpinA1 siRNA (siSerpinA1), or nontargeting siRNA (siNT), & western blot analysis was performed for detection of Snail & SerpinA1 expression. C. DLD-1 & SW480 cells were transfected with pcDNA-Snail (Snail) or control vector pcDNA (vector), & ChIP assays were performed. The presence of the serpinA1 promoter (−516/−4) was verified in immunoprecipitates with either mouse IgG or anti-Snail antibodies, & assay inputs were analyzed using real-time PCR. The samples were loaded on agarose gels. D. Data show promoter enrichment in the anti-Snail immunoprecipitate relative to IgG. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/26015410), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Serpin-A1-alpha-1-Antitrypsin-Antibody-Immunohistochemistry-NBP1-90309-img0030.jpg	
Analysis in human plasma.	
Analysis using antibody NBP1-90309 (A) shows similar pattern to independent antibody NBP1-90308 (B).	

Publications

Guan S, DarmstAdter M, Xu C, Rosenecker J In Vitro Investigations on Optimizing and Nebulization of IVT-mRNA Formulations for Potential Pulmonary-Based Alpha-1-Antitrypsin Deficiency Treatment Pharmaceutics 2021-08-17 [PMID: 34452241] (ICC/IF, Human)

Connolly B, Isaacs C et al. SERPINA1 mRNA as a Treatment for Alpha-1 Antitrypsin Deficiency. J Nucleic Acids 2018-07-17 [PMID: 30009048] (GS, Human)

Furuya H, Chan O, Hokutan K, et al. Prognostic Significance of Lymphocyte Infiltration and a Stromal Immunostaining of a Bladder Cancer Associated Diagnostic Panel in Urothelial Carcinoma Diagnostics 2019-12-28 [PMID: 31905599] (IHC-P, Human)

Shen S, Sanchez ME, Blomenkamp K et al. Amelioration of Alpha-1 Antitrypsin Deficiency Diseases with Genome Editing in Transgenic Mice Hum. Gene Ther. 2018-06-22 [PMID: 29641323] (IHC-P, Human)

Kwon CH, Park HJ, Choi JH et al. Snail and serpinA1 promote tumor progression and predict prognosis in colorectal cancer. Oncotarget 2015-08-21 [PMID: 26015410] (WB, Human)

Kwon CH, Park HJ, Lee JR et al. Serpin peptidase inhibitor clade A member 1 is a biomarker of poor prognosis in gastric cancer. Br J Cancer 2014-11-11 [PMID: 25211665] (IF/IHC, WB, Human)

Zhang G, Gomes-Giacoia E, Dai Y et al. Validation and clinicopathologic associations of a urine-based bladder cancer biomarker signature. Diagn Pathol 2014-11-12 [PMID: 25387487] (IHC-P, Human)

Miyake M, Ross S, Lawton A et al. Investigation of CCL18 and A1AT as potential urinary biomarkers for bladder cancer detection. BMC Urol. 2013-09-05 [PMID: 24011266] (IHC-P, Human)

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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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