

Product Datasheet

Serpin A1/alpha 1-Antitrypsin Antibody 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

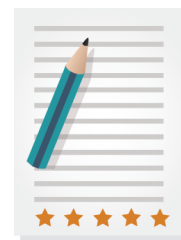
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NBP1-90309**Serpin A1/alpha 1-Antitrypsin Antibody**

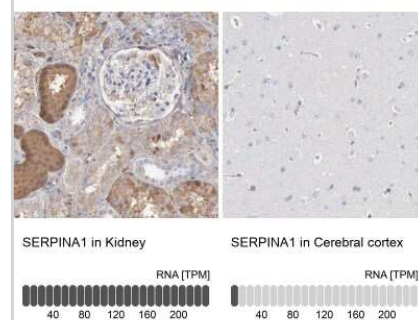
Product Information	
Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol

Product Description	
Host	Rabbit
Gene ID	5265
Gene Symbol	SERPINA1
Species	Human
Reactivity Notes	Human reactivity reported in scientific literature (PMID: 25211665).
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: HDQDHPTFNKITPNLAEFAFSLYRQLAHQSNSTNIFFSPVSIATAFAMLSLGTKA DTHDEILEGLNFNLTEIPEAQIHEGFQELLRTLNPDSQLQLTTGNGLFLSEGLK LVDFLEEDVKKLYHSEAFTVNFVDTEEAKKQINDYGAPHR

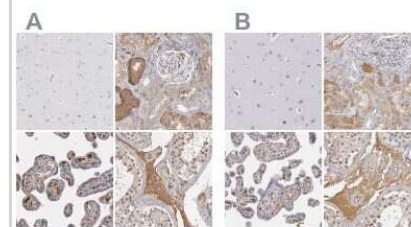
Product Application Details	
Applications	Western Blot, Simple Western, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 0.04-0.4 ug/ml, Simple Western reported by internal validation, Immunohistochemistry 1:2500 - 1:5000, 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. In Simple Western internal 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

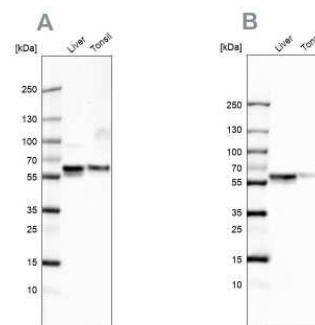
Immunohistochemistry-Paraffin: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Analysis in human kidney and cerebral cortex tissues using NBP1-90309 antibody. Corresponding SERPINA1 RNA-seq data are presented for the same tissues.



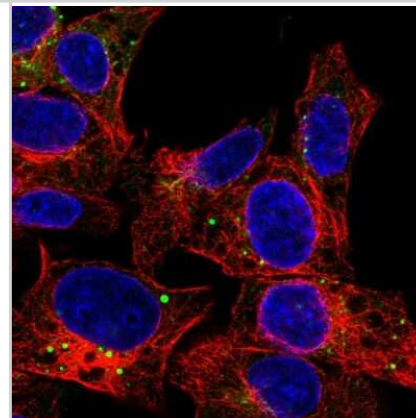
Immunohistochemistry-Paraffin: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Staining of human cerebral cortex, kidney, placenta and testis using Anti-SERPINA1 antibody NBP1-90309 (A) shows similar protein distribution across tissues to independent antibody NBP1-90308 (B).



Western Blot: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Analysis using Anti-SERPINA1 antibody NBP1-90309 (A) shows similar pattern to independent antibody NBP1-90308 (B).



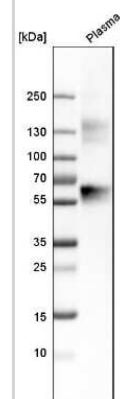
Immunocytochemistry/Immunofluorescence: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Staining of human cell line Hep G2 shows localization to vesicles. Antibody staining is shown in green.



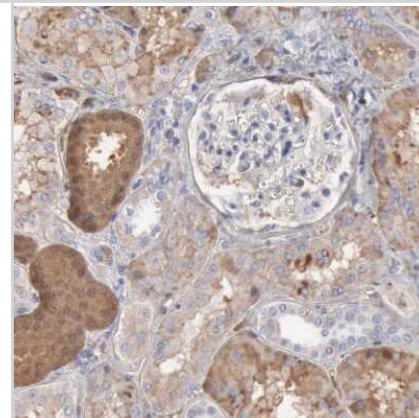
Immunohistochemistry: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Assessment of CCL18 and A1AT (Serpin A1/alpha 1-Antitrypsin) in bladder tissue. Representative immunostaining of benign bladder for A1AT (top-left), low-grade non-muscle invasive BCa for A1AT (top-middle), and high-grade muscle invasive BCa for A1AT (top-right). A1AT staining was present in the cytoplasm and stroma. A1AT staining varied from weak and focal to strong and diffuse. Lower panel shows column bar graphs of A1AT immunohistochemical staining intensity of benign bladder vs. bladder cancer, low-grade vs. high-grade, NMIBC vs. MIBC. Image collected and cropped by CiteAb from the following publication (<http://bmcurol.biomedcentral.com/articles/10.1186/1471-2490-13-42>), licensed under a CC-BY license.



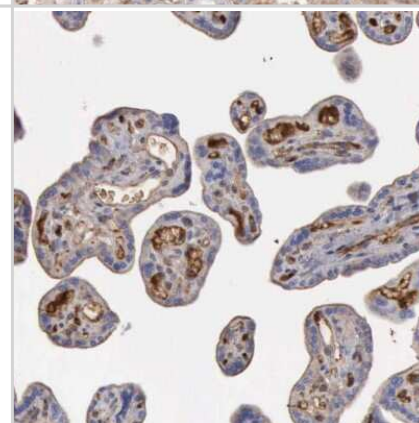
Western Blot: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Analysis in human plasma.



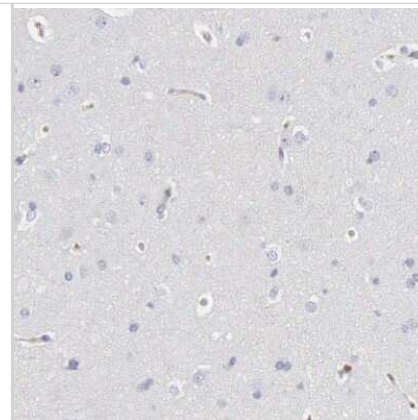
Immunohistochemistry-Paraffin: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Staining of human kidney shows moderate positivity in plasma.



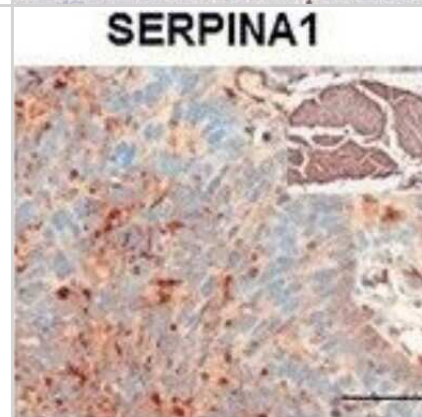
Immunohistochemistry-Paraffin: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Staining of human placenta shows strong positivity in plasma in blood vessels.



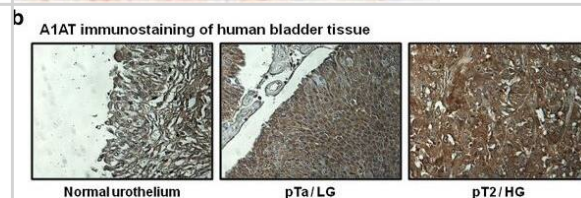
Immunohistochemistry-Paraffin: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Staining of human cerebral cortex shows no positivity in neurons as expected.



Immunohistochemistry: Serpin A1/alpha 1-Antitrypsin Antibody [NBP1-90309] - Representative expression status for SERPINA1 level in benign tissue. All images were captured at 400x magnification. Image collected and cropped by CiteAb from the following publication (<http://diagnosticpathology.biomedcentral.com/articles/10.1186/s13000-014-0200-1>), licensed under a CC-BY license.



Assessment of CCL18 and A1AT in bladder tissue. b) Representative immunostaining of benign bladder for A1AT (top-left), low-grade non-muscle invasive BCa for A1AT (top-middle), and high-grade muscle invasive BCa for A1AT (top-right). A1AT staining was present in the cytoplasm and stroma. A1AT staining varied from weak and focal to strong and diffuse. Lower panel shows column bar graphs of A1AT immunohistochemical staining intensity of benign bladder vs. bladder cancer, low-grade vs. high-grade, NMIBC vs. MIBC. Image collected and cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/24011266>), licensed under a CC-BY licence.



3D target protein expression in multicellular tumor spheroids 3D expression analysis was carried out in the MCF-7, MDA-MB-231 and HBL-100 cell lines using multicellular tumor spheroids. The spheroids were cultured in spinner flasks for 1 week before fixation. Hypoxyprobe was used to examine the formation of hypoxic areas within the spheroids. NHE1, CAIX, MMP14 and FIH-1 expression was also analyzed. Incubation for an hour with PBS instead of primary antibody acted as a control. Image collected and cropped by CiteAb from the following open publication (<https://www.oncotarget.com/lookup/doi/10.18632/oncotarget.17143>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



Publications

Guan S, Darmstadt 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 Pharmaceuticals 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, Blumenkamp 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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Products Related to NBP1-90309

NBP1-90309PEP	Serpin A1/alpha 1-Antitrypsin Recombinant Protein Antigen
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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