

# Product Datasheet

## alpha-Smooth Muscle Actin Antibody NB300-978

Unit Size: 0.1 mg

Store at -20C. Avoid freeze-thaw cycles.

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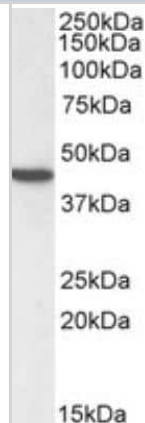
**NB300-978****alpha-Smooth Muscle Actin Antibody**

Product Information	
Unit Size	0.1 mg
Concentration	0.5 mg/ml
Storage	Store at -20C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	Tris saline (20 mM Tris pH 7.3, 150 mM NaCl), 0.5% BSA
Target Molecular Weight	42 kDa
Product Description	
Host	Goat
Gene ID	59
Gene Symbol	ACTA2
Species	Human, Mouse, Rabbit
Reactivity Notes	Mouse reactivity reported in scientific literature (PMID: 25619662). Rabbit reactivity reported in scientific literature (PMID: 30480706 and PMID: 33263285).
Marker	Mesenchymal Cell Marker
Specificity/Sensitivity	Variants NP_001604.1 and NP_001135417.1 encode the same protein.
Immunogen	Alpha-Smooth Muscle Actin Antibody is made to a peptide with sequence EEEDSTALVC corresponding to N-Terminus according to NP_001604.1, NP_001135417.1.
Product Application Details	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Immunohistochemistry-Paraffin, Peptide ELISA, Immunohistochemistry Free-Floating
Recommended Dilutions	Western Blot 0.3 - 2 ug/mL, Immunohistochemistry, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry-Paraffin, Immunohistochemistry-Frozen, Peptide ELISA Detection limit 1:32000, Immunohistochemistry Free-Floating
Application Notes	Approx 45 kDa band observed in HeLa, NIH3T3, Mouse Duodenum and Human Heart lyates, and also in preliminary testing of Rat Duodenum lysates (calculated MW of 42 kDa according to NP_001604 and NP_031418.1). Alpha-Smooth Muscle Actin Antibody is validated for IHC-Fr, ICC/IF from verified customer reviews.

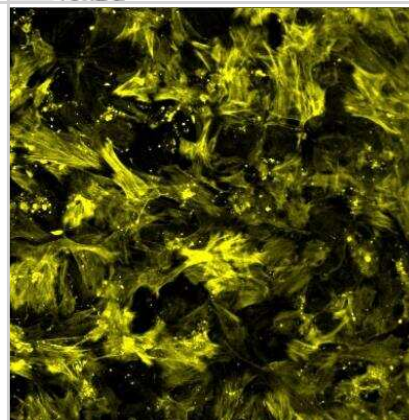


## Images

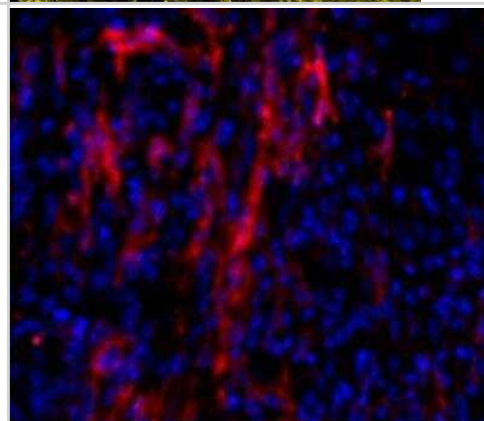
Western Blot: alpha-Smooth Muscle Actin Antibody [NB300-978] - (1ug/ml) staining of Mouse Duodenum lysate (35ug protein in RIPA buffer). Detected by chemiluminescence.



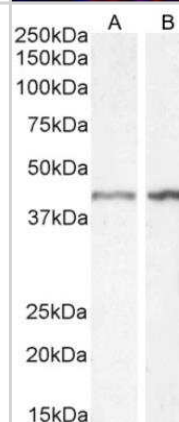
Immunocytochemistry/Immunofluorescence: alpha-Smooth Muscle Actin Antibody [NB300-978] - SMA antibody staining on mouse fibroblasts. Primary antibody at 1:1000, incubation at 4C overnight. ICC/IF image submitted by a verified customer review.



Immunohistochemistry-Frozen: alpha-Smooth Muscle Actin Antibody [NB300-978] - Infarcted mouse heart frozen tissue section immunostained with alpha-Smooth Muscle Actin Antibody. IHC-Fr image submitted by a verified customer review.



alpha-Smooth Muscle Actin Antibody [NB300-978] - (1ug/ml) staining of HeLa (A) and (2ug/ml) NIH3T3 (B) cell lysate (35ug protein in RIPA buffer). Detected by chemiluminescence.



## Publications

Jeong J, Tanaka M, Yang Y et al. An optimized visualization and quantitative protocol for in-depth evaluation of lymphatic vessel architecture in the liver American journal of physiology. Gastrointestinal and liver physiology 2023-08-22 [PMID: 37605828]

Shiju TM, Sampaio LP, Martinez VV et al. Transforming growth factor beta-3 localization in the corneal response to epithelial-stromal injury and effects on corneal fibroblast transition to myofibroblasts Experimental eye research 2023-08-24 [PMID: 37633325]

Xu M, Tan J, Zhu L et al. Palmitoyltransferase ZDHHC3 Aggravates Nonalcoholic Steatohepatitis by Targeting S-Palmitoylated IRHOM2 Advanced science (Weinheim, Baden-Wurttemberg, Germany) 2023-08-06 [PMID: 37544908]

Fang, ZF;Wang, ZN;Chen, Z;Peng, Y;Fu, Y;Yang, Y;Han, HL;Teng, YB;Zhou, W;Xu, D;Liu, XY;Xie, JX;Zhang, JJ;Zhong, NS; Fine particulate matter contributes to COPD-like pathophysiology: experimental evidence from rats exposed to diesel exhaust particles Respiratory research 2024-01-04 [PMID: 38178075]

Ilayda Ozsan McMillan, Marla Gearing, Lianchun Wang, Jan Korabecny, Darko Kero Vascular Heparan Sulfate and Amyloid- $\beta$  in Alzheimer's Disease Patients International Journal of Molecular Sciences 2024-04-02 [PMID: 38612775]

Lassiter R, Merchen Td, Fang X, Wang Y Protective Role of Kynurenine 3-Monooxygenase in Allograft Rejection and Tubular Injury in Kidney Transplantation Frontiers in immunology 2021-07-07 [PMID: 34305900]

Alex J. Smith, Gokhan Akdemir, Meetu Wadhwa, Dan Song, Alan S. Verkman Application of fluorescent dextrans to the brain surface under constant pressure reveals AQP4-independent solute uptake The Journal of General Physiology 2021-08-02 [PMID: 34128962]

Nicole M. Marchetto, Salma Begum, Tracy Wu, Valerie O'Besso, Christina C. Yarborough, Nuriban Valero-Pacheco, Aimee M. Beaulieu, Jan K. Kitajewski, Carrie J. Shawber, Nataki C. Douglas Endothelial Jagged1 Antagonizes Dll4/Notch Signaling in Decidual Angiogenesis during Early Mouse Pregnancy International Journal of Molecular Sciences 2020-09-05 [PMID: 32899448]

Jacqueline Chevalier, Hao Yin, John-Michael Arpino, Caroline O'Neil, Zengxuan Nong, Kevin J. Gilmore, Jason J. Lee, Emma Prescott, Matthew Hewak, Charles L. Rice, Luc Dubois, Adam H. Power, Douglas W. Hamilton, J. Geoffrey Pickering Obstruction of Small Arterioles in Patients with Critical Limb Ischemia due to Partial Endothelial-to-Mesenchymal Transition iScience 2020-06-06 [PMID: 32629616]

Kim D, Goo B, Shi H et al. Integrative multiomics analysis of neointima proliferation in human saphenous vein: implications for bypass graft disease bioRxiv : the preprint server for biology 2023-11-17 [PMID: 38014255]

More HL, Braam B, Cupples WA. Reduced tubuloglomerular feedback activity and absence of its synchronization in a connexin40 knockout rat Frontiers in Network Physiology 2023-08-29 [PMID: 37705697]

Guan X, Liu D, Zhou H et al. Melatonin improves pregnancy outcomes in adenomyosis mice by restoring endometrial receptivity via NF- $\kappa$ B/apoptosis signaling Annals of Translational Medicine 2022-12-01 [PMID: 36660689]

More publications at <http://www.novusbio.com/NB300-978>





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### **Products Related to NB300-978**

NBL1-07272	alpha-Smooth Muscle Actin Overexpression Lysate
HAF017	Rabbit anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
HAF109	Donkey anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
NB410-28088-1mg	Goat IgG Isotype Control

### **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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