

# Product Datasheet

## alpha-Smooth Muscle Actin Antibody - BSA Free NBP1-30894

Unit Size: 100 ul

Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

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Updated 3/4/2026 v.20.1

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**NBP1-30894**

alpha-Smooth Muscle Actin Antibody - BSA Free

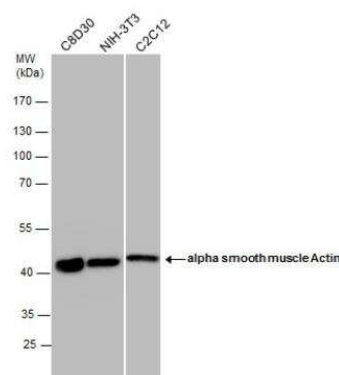
Product Information	
Unit Size	100 ul
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.025% Proclin 300
Isotype	IgG
Purity	Antigen Affinity-purified
Buffer	PBS, 20% Glycerol
Target Molecular Weight	42 kDa

Product Description	
Host	Rabbit
Gene ID	59
Gene Symbol	ACTA2
Species	Human, Mouse, Rat, Zebrafish
Reactivity Notes	Use in Canine reported in scientific literature (PMID: 32330426). Predicted to show a broad reactivity.
Marker	Mesenchymal Cell Marker
Immunogen	Carrier-protein conjugated synthetic peptide encompassing a sequence within the N-terminus region of human alpha-Smooth Muscle Actin. The exact sequence is proprietary.

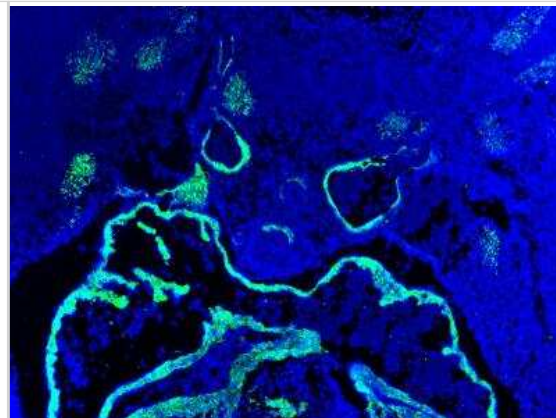
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Immunocytochemistry/Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, Knockdown Validated
Recommended Dilutions	Western Blot 1:500-1:3000, Immunohistochemistry 1:100-1:1000, Immunocytochemistry/ Immunofluorescence 1:100-1:1000, Immunohistochemistry-Paraffin 1:100-1:1000, Immunohistochemistry-Frozen Assay-dependent dilution., Knockdown Validated

**Images**

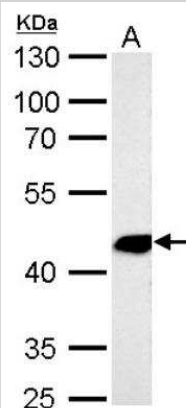
Western Blot: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - Various whole cell extracts (30 ug) were separated by 10% SDS-PAGE, and the membrane was blotted with alpha-Smooth Muscle Actin Antibody diluted at a dilution of 1:3000. The bands indicate an observed molecular weight of ~45 kDa and the theoretical molecular weight is 42 kDa.



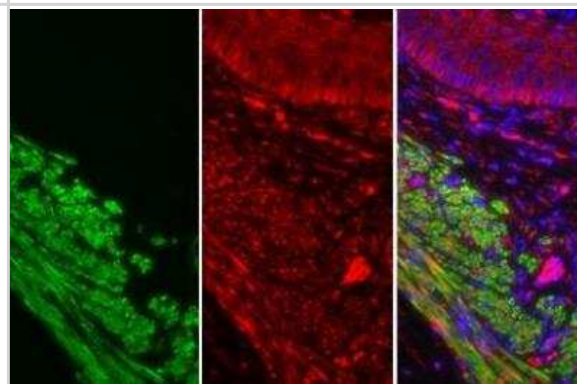
Immunohistochemistry-Frozen: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - Smooth Muscle alpha staining on E11.5 mouse Pharyngeal Mesoderm. Fixed with 4% PFA overnight. Blocked with 1% BSA. Primary antibody at 1:100. Secondary antibody at 1:1000, conjugated to Alexa Fluor 488. IHC-Fr image submitted by a verified customer review.



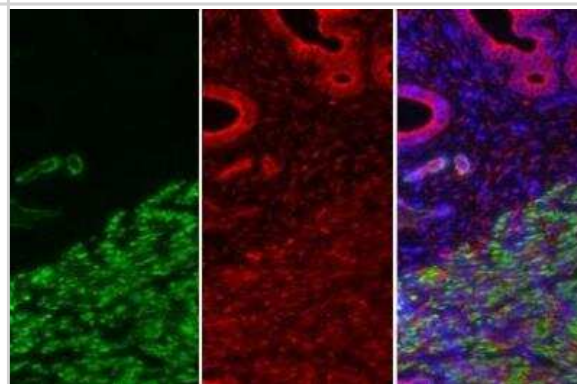
Western Blot: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - 30 ug Rat 2 whole cell lysate/extract 10% SDS-PAGE gel with the dilution of alpha-Smooth Muscle Actin Antibody at 1:1000. The band indicates an observed molecular weight of ~45 kDa and the theoretical molecular weight is 42 kDa.



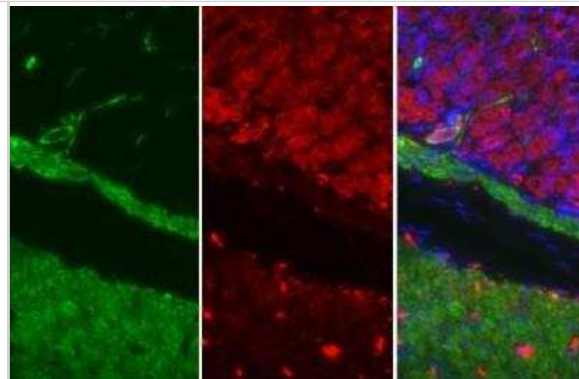
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - alpha Smooth Muscle Actin antibody detects alpha Smooth Muscle Actin protein at cytoplasm by immunohistochemical analysis. Sample: Paraffin-embedded mouse cervix. Green: alpha Smooth Muscle Actin stained by alpha Smooth Muscle Actin antibody diluted at 1:1000. Red: alpha Tubulin, a cytoskeleton marker, stained by alpha Tubulin antibody diluted at 1:1000. Blue: Fluoroshield with DAPI. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.



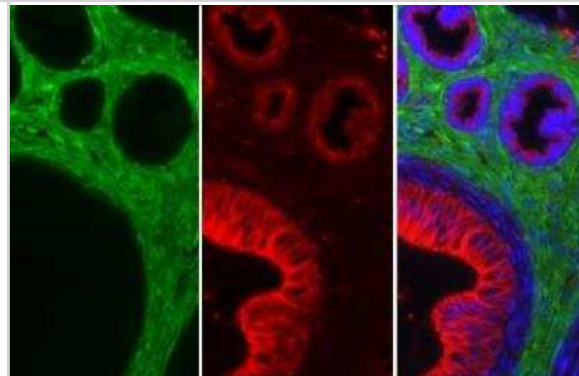
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - alpha Smooth Muscle Actin antibody detects alpha Smooth Muscle Actin protein at cytoplasm by immunohistochemical analysis. Sample: Paraffin-embedded rat cervix. Green: alpha Smooth Muscle Actin stained by alpha Smooth Muscle Actin antibody diluted at 1:1000. Red: alpha Tubulin, a cytoskeleton marker, stained by alpha Tubulin antibody diluted at 1:1000. Blue: Fluoroshield with DAPI. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.



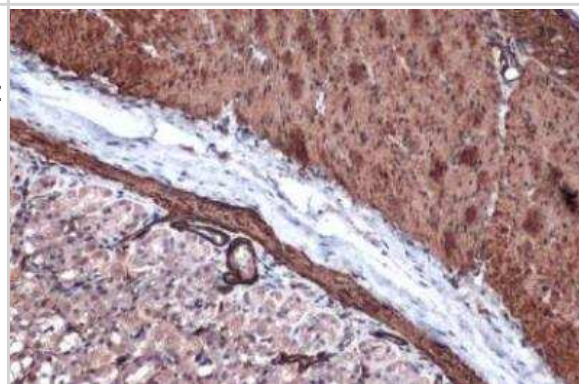
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - alpha Smooth Muscle Actin antibody detects alpha Smooth Muscle Actin protein at cytoplasm by immunohistochemical analysis. Sample: Paraffin-embedded rat stomach. Green: alpha Smooth Muscle Actin stained by alpha Smooth Muscle Actin antibody diluted at 1:1000. Red: alpha Tubulin, a cytoskeleton marker, stained by alpha Tubulin antibody diluted at 1:1000. Blue: Fluoroshield with DAPI. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.



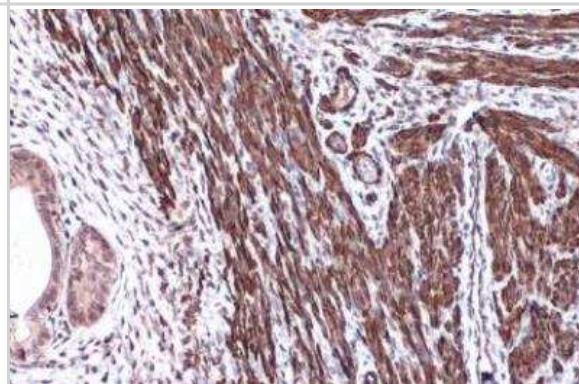
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - alpha Smooth Muscle Actin antibody detects alpha Smooth Muscle Actin protein at cytoplasm by immunohistochemical analysis. Sample: Paraffin-embedded mouse prostate. Green: alpha Smooth Muscle Actin stained by alpha Smooth Muscle Actin antibody diluted at 1:1000. Red: alpha Tubulin, a cytoskeleton marker, stained by alpha Tubulin antibody diluted at 1:1000. Blue: Fluoroshield with DAPI. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.



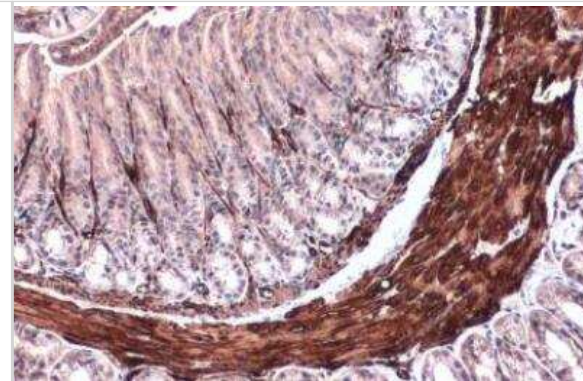
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - Rat stomach. Alpha Smooth Muscle Actin stained by alpha Smooth Muscle Actin antibody diluted at 1:2000. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



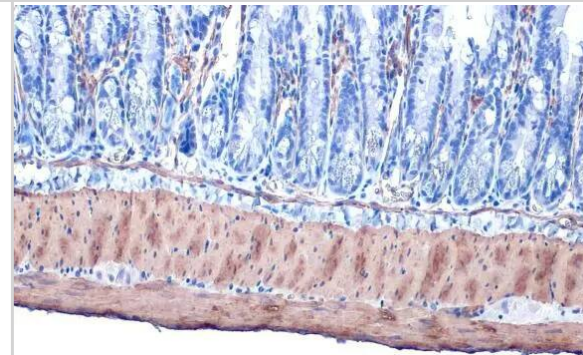
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - Rat cervix. Alpha Smooth Muscle Actin stained by alpha Smooth Muscle Actin diluted at 1:2000. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.



Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - Mouse duodenum. Alpha Smooth Muscle Actin stained by alpha Smooth Muscle Actin antibody diluted at 1:2000. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min.

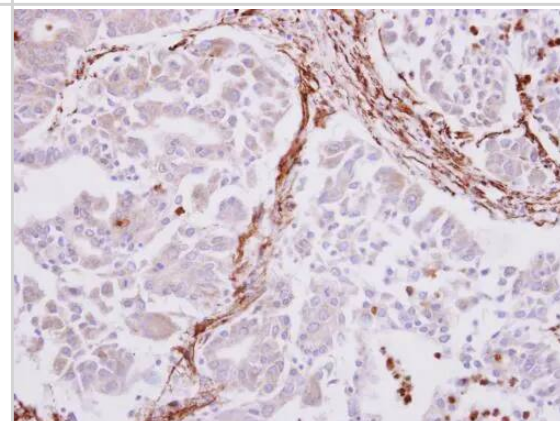


Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - alpha-Smooth Muscle Actin antibody detects alpha-Smooth Muscle Actin protein at cytoplasm by immunohistochemical analysis. Sample: Paraffin-embedded mouse smooth muscle. alpha-Smooth Muscle Actin stained by alpha-Smooth Muscle Actin antibody (NBP1-30894) diluted at 1:500. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min

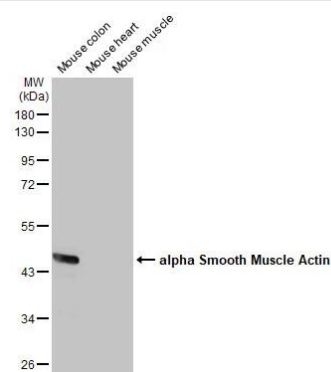


Immunohistochemistry: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - alpha smooth muscle Actin antibody detects alpha smooth muscle Actin protein at cytoplasm on human liver carcinoma stroma by immunohistochemical analysis.

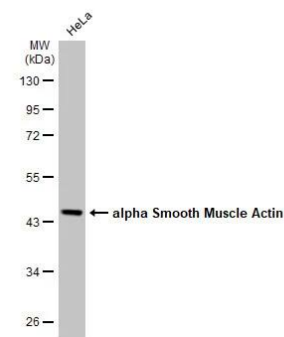
Sample: Paraffin-embedded liver carcinoma stroma.  
alpha smooth muscle Actin antibody (NBP1-30894) diluted at 1:500.  
Antigen Retrieval: Trilogy™ (EDTA based, pH 8.0) buffer, 15min



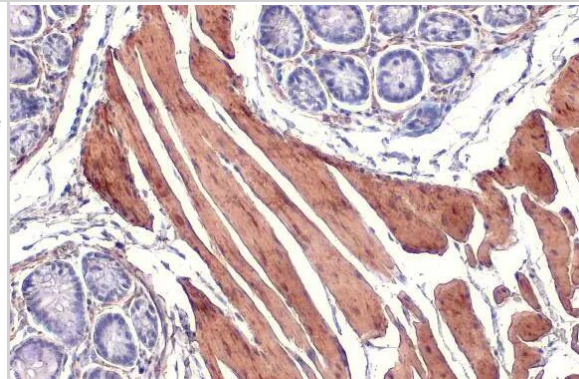
Western Blot: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - Various tissue extracts (50 ug) were separated by 10% SDS-PAGE, and the membrane was blotted with alpha-Smooth Muscle Actin antibody (NBP1-30894) diluted at 1:5000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.



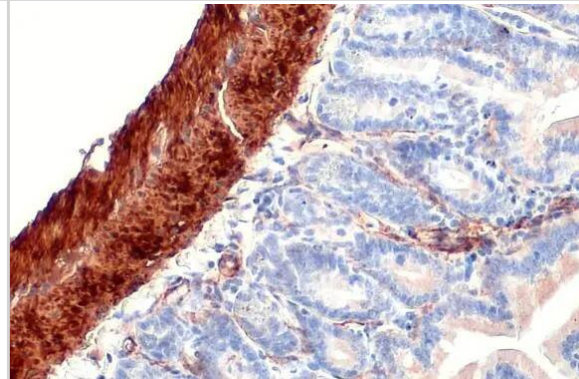
Western Blot: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - Whole cell extract (30 ug) was separated by 10% SDS-PAGE, and the membrane was blotted with alpha-Smooth Muscle Actin antibody (NBP1-30894) diluted at 1:500. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.



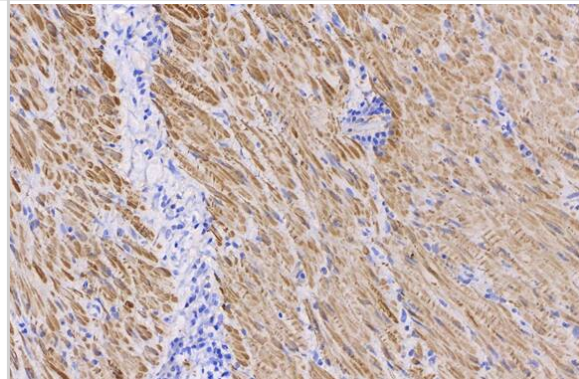
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - alpha-Smooth Muscle Actin antibody detects alpha-Smooth Muscle Actin protein at cytoplasm by immunohistochemical analysis. Sample: Paraffin-embedded mouse colon. alpha-Smooth Muscle Actin stained by alpha-Smooth Muscle Actin antibody (NBP1-30894) diluted at 1:500. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



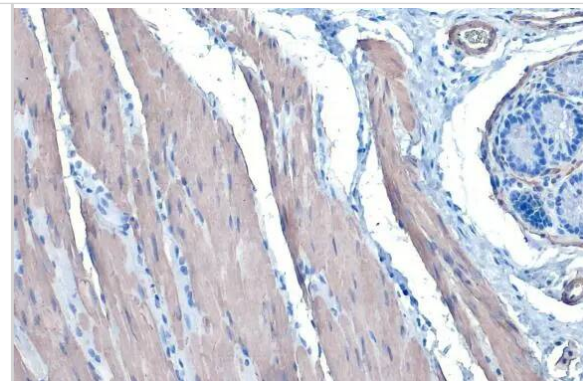
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - alpha-Smooth Muscle Actin antibody detects alpha-Smooth Muscle Actin protein at cytoplasm by immunohistochemical analysis. Sample: Paraffin-embedded mouse duodenum. alpha-Smooth Muscle Actin stained by alpha-Smooth Muscle Actin antibody (NBP1-30894) diluted at 1:500. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



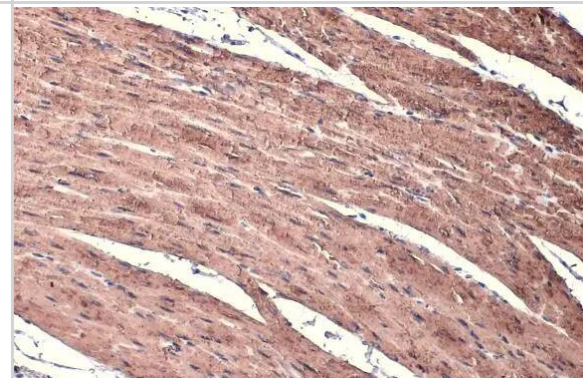
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - alpha-Smooth Muscle Actin antibody detects alpha-Smooth Muscle Actin protein at cytoplasm by immunohistochemical analysis (Autostainer Formulated). Sample: Paraffin-embedded human normal colon tissue. alpha-Smooth Muscle Actin stained by alpha-Smooth Muscle Actin antibody (NBP1-30894) diluted at 1:500. Antigen Retrieval: Citrate buffer, 20 min



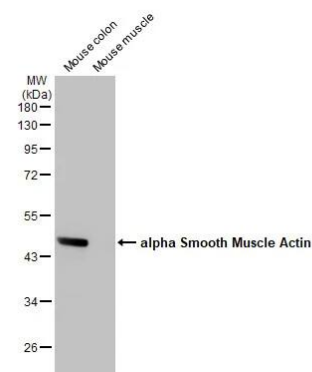
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - alpha-Smooth Muscle Actin antibody detects alpha-Smooth Muscle Actin protein at cytoplasm by immunohistochemical analysis. Sample: Paraffin-embedded mouse smooth muscle. alpha-Smooth Muscle Actin stained by alpha-Smooth Muscle Actin antibody (NBP1-30894) diluted at 1:500. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



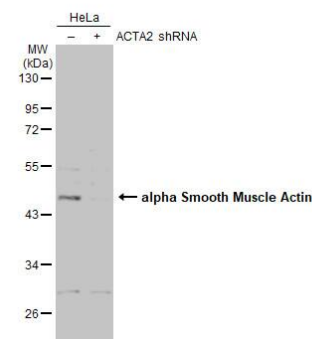
Immunohistochemistry-Paraffin: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - alpha-Smooth Muscle Actin antibody detects alpha-Smooth Muscle Actin protein at cytoplasm by immunohistochemical analysis. Sample: Paraffin-embedded mouse smooth muscle. alpha-Smooth Muscle Actin stained by alpha-Smooth Muscle Actin antibody (NBP1-30894) diluted at 1:500. Antigen Retrieval: Citrate buffer, pH 6.0, 15 min



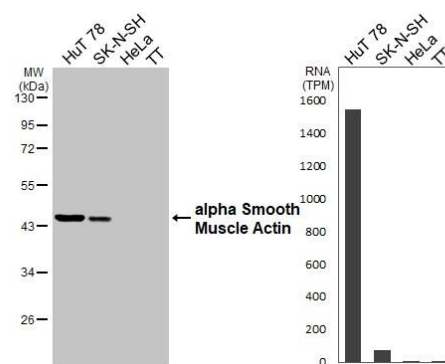
Western Blot: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - Various tissue extracts (50 ug) were separated by 10% SDS-PAGE, and the membrane was blotted with alpha-Smooth Muscle Actin antibody (NBP1-30894) diluted at 1:200000. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.



Western Blot: alpha-Smooth Muscle Actin Antibody [NBP1-30894] - Non-transfected (-) and transfected (+) HeLa whole cell extracts (30 ug) were separated by 10% SDS-PAGE, and the membrane was blotted with alpha Smooth Muscle Actin antibody diluted at 1:500. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody.



Various whole cell extracts (30 ug) were separated by 10% SDS-PAGE, and the membrane was blotted with alpha-Smooth Muscle Actin antibody (NBP1-30894) diluted at 1:500. The HRP-conjugated anti-rabbit IgG antibody was used to detect the primary antibody. Corresponding RNA expression data for the same cell lines are based on Human Protein Atlas program.



## Publications

Ozgun G, Sahin B, Atasoy B et al. Astaxanthin mitigates radiation-induced erectile dysfunction: protective effects on corpus cavernosum in a rat model. *International journal of impotence research* 2025-06-13 [PMID: 40514409]

Takada, H;Sasagawa, Y;Yoshimura, M;Tanaka, K;Iwayama, Y;Hayashi, T;Isomura-Matoba, A;Nikaido, I;Kurisaki, A; Single-cell transcriptomics uncovers EGFR signaling-mediated gastric progenitor cell differentiation in stomach homeostasis *Nature communications* 2023-06-29 [PMID: 37386010] (Immunohistochemistry-Paraffin, Mouse)

Gui T, Chen Q, Li J et al. Astragaloside IV alleviates 1-deoxysphinganine-induced mitochondrial dysfunction during the progression of chronic kidney disease through p62-Nrf2 antioxidant pathway *Frontiers in Pharmacology* 2023-03-24 [PMID: 37033627] (Immunohistochemistry-Paraffin, Mouse)

Banerjee S, Xu W, Chowdhury I, Driss A et Al. Human Myometrial and Uterine Fibroid Stem Cell-Derived Organoids for Intervening the Pathophysiology of Uterine Fibroid *Reprod Sci* 2022-05-18 [PMID: 35585291]

Hong E, Barczak W, Park S et al. Combination treatment of T1-44, a PRMT5 inhibitor with Vactosertib, an inhibitor of TGF- $\beta$  signaling, inhibits invasion and prolongs survival in a mouse model of pancreatic tumors *Cell death & disease* 2023-02-10 [PMID: 36765032] (IHC, Mouse)

Wu M, Matar DY, Yu Z et al. Continuous NPWT Regulates Fibrosis in Murine Diabetic Wound Healing *Pharmaceutics* 2022-10-06 [PMID: 36297560] (IHC-P, Mouse)

Wu M, Yu Z, Matar DY et al. Human Amniotic Membrane Promotes Angiogenesis in an Oxidative Stress Chronic Diabetic Murine Wound Model *Advances in wound care* 2022-03-16 [PMID: 35293255] (IF/IHC, Mouse)

Xie J, Yuan S, Peng L et al. Antitumor immunity targeting fibroblast activation protein  $\alpha$  in a mouse Lewis lung carcinoma model *Oncol Lett* 2020-05-18 [PMID: 32566014] (WB, Mouse)

Miyadera K, Conatser L, Llanga TA et al. Intrastromal Gene Therapy Prevents and Reverses Advanced Corneal Clouding in a Canine Model of Mucopolysaccharidosis I *Mol. Ther.* 2020-04-11 [PMID: 32330426] (IF/IHC, Canine)

Hong E, Park S, Ooshima A et al. Inhibition of TGF-beta signalling in combination with nal-IRI plus 5-Fluorouracil/Leucovorin suppresses invasion and prolongs survival in pancreatic tumour mouse models *Sci Rep* 2020-02-19 [PMID: 32076068] (IF/IHC, Mouse)

Gai Z, Visentin M, Gui T et al. The effects of farnesoid X receptor activation on arachidonic acid metabolism, NF-kB signaling and hepatic inflammation *Mol. Pharmacol.* 2018-05-09 [PMID: 29743187] (IF/IHC, Human)

Gai Z, Chu L, Xu Z et al. Farnesoid X receptor activation protects the kidney from ischemia-reperfusion damage *Sci Rep* 2017-08-29 [PMID: 28852062] (IHC-P, Mouse)



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General: novus@novusbio.com

### **Products Related to NBP1-30894**

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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
H00000059-P01-10ug	Recombinant Human alpha-Smooth Muscle Actin GST (N-Term) Protein

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### **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.

For more information on our 100% guarantee, please visit [www.novusbio.com/guarantee](http://www.novusbio.com/guarantee)

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