

# Product Datasheet

## Transgelin/TAGLN/SM22 alpha Antibody NB600-507

Unit Size: 0.1 mg

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

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**NB600-507**

## Transgelin/TAGLN/SM22 alpha Antibody

<b>Product Information</b>	
<b>Unit Size</b>	0.1 mg
<b>Concentration</b>	0.5 mg/ml
<b>Storage</b>	Store at -20C. Avoid freeze-thaw cycles.
<b>Clonality</b>	Polyclonal
<b>Preservative</b>	0.02% Sodium Azide
<b>Isotype</b>	IgG
<b>Purity</b>	Immunogen affinity purified
<b>Buffer</b>	Tris saline (20 mM Tris pH 7.3, 150 mM NaCl), 0.5% BSA
<b>Product Description</b>	
<b>Host</b>	Goat
<b>Gene ID</b>	6876
<b>Gene Symbol</b>	TAGLN
<b>Species</b>	Human, Mouse, Rat, Rabbit
<b>Reactivity Notes</b>	This antibody has been successfully used in Western blot in Rat (PMID: 27531064) and Rabbit (PMID: 20861082). Use in Mouse reported in scientific literature (PMID:32134397).
<b>Specificity/Sensitivity</b>	NP_003177.2 and NP_001001522.1 represent identical protein. The transgelin protein is found in fibroblasts and smooth muscle and is known as a transformation or shape change protein that is involved with actin cross-linking. Transgelin is one of the earliest markers of differentiated smooth muscle cells and recent evidence suggests that transgelin acts as a tumor suppressor.
<b>Immunogen</b>	Peptide with sequence C-MTGYGRPRQIIS corresponding to C-Terminus according to NP_003177.2.
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin, Peptide ELISA, Knockdown Validated
<b>Recommended Dilutions</b>	Western Blot 0.1 - 1 ug/mL, Immunohistochemistry, Immunohistochemistry-Paraffin 2.5 ug/mL, Peptide ELISA 1:4000, Knockdown Validated
<b>Application Notes</b>	Use in Immunohistochemistry reported in scientific literature (PMID: 31965901). Knockdown validation (PMID: 32134397).

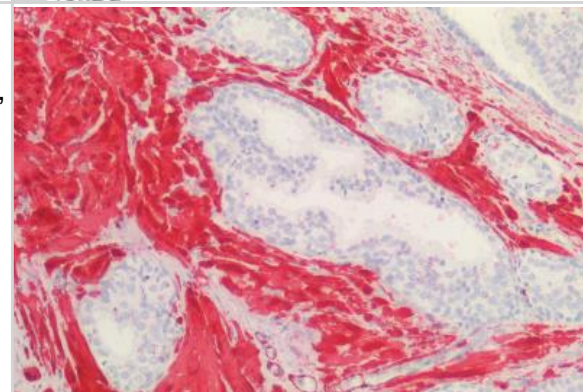


## Images

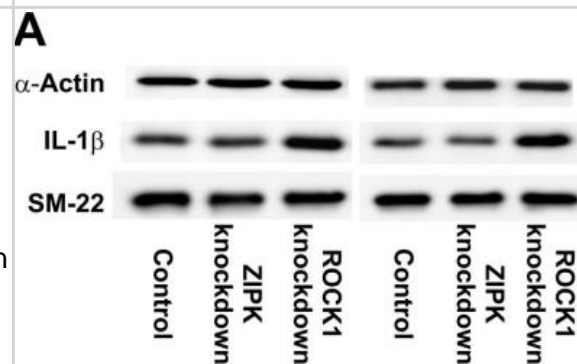
Western Blot: Transgelin/TAGLN/SM22 alpha Antibody [NB600-507] - Staining of Human Testes lysate (35 ug protein in RIPA buffer). Antibody at 0.3 ug/mL. Detected by chemiluminescence.

250kDa  
150kDa  
100kDa  
75kDa  
50kDa  
37kDa  
25kDa  
20kDa  
15kDa

Immunohistochemistry-Paraffin: Transgelin/TAGLN/SM22 alpha Antibody [NB600-507] - Staining of paraffin embedded Human Prostate. Antibody at 2.5 ug/mL. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.



Western Blot: Transgelin/TAGLN/SM22 alpha Antibody [NB600-507] - Effects of ROCK1 and ZIPK knockdown on IL-1beta protein expression. IL-1beta protein expression in control cells and cells transfected with ZIPK or ROCK1 siRNA was examined by western blotting. Two representative western blots showing the levels of IL-1beta in control UASMC and in UASMC 48 h after transfection with siRNAs to ZIPK or ROCK1. Two loading controls were used: alpha-actin and SM-22. Image collected and cropped by CiteAb from the following publication (<http://dx.plos.org/10.1371/journal.pone.0116969>) licensed under a CC-BY licence.



## Publications

PUtz S, Barthel LS, Frohn M et al. Caldesmon ablation in mice causes umbilical herniation and alters contractility of fetal urinary bladder smooth muscle *The Journal of general physiology* Jul 5 2021 12:00AM [PMID: 34115104]

Li J, Liu H, Takagi S et Al. Renal protective effects of empagliflozin via inhibition of EMT and aberrant glycolysis in proximal tubules *JCI Insight* Mar 26 2020 12:00AM [PMID: 32134397] (WB, KD, Mouse)

Takagaki Y, Lee SM, Dongqing Z et al. Endothelial autophagy deficiency induces IL6 - dependent endothelial mesenchymal transition and organ fibrosis *Autophagy* Jan 22 2020 12:00AM [PMID: 31965901] (IHC, WB)

Deng JT, Bhaidani S, Sutherland C Rho-associated kinase and zipper-interacting protein kinase, but not myosin light chain kinase, are involved in the regulation of myosin phosphorylation in serum-stimulated human arterial smooth muscle cells *PLoS ONE* Dec 13 2019 12:00AM [PMID: 31834925] (WB, Human)

Hong K, Zhao G, Hong Z et al. Mechanical activation of angiotensin II type 1 receptors causes actin remodelling and myogenic responsiveness in skeletal muscle arterioles. *J. Physiol. (Lond.)*. Aug 17 2016 12:00AM [PMID: 27531064] (WB, Rat)

Thibodeau JF, Holterman CE, He Y et al. Vascular smooth muscle-specific EP4 receptor deletion in mice exacerbates angiotensin II-induced renal injury. *Antioxid. Redox Signal.* Jun 1 2016 12:00AM [PMID: 27245461]

Herencia C, Diaz-Tocados JM, Jurado L et al. Procaine Inhibits Osteo/Odontogenesis through Wnt/b-Catenin Inactivation. *PLoS ONE* Jun 4 2016 12:00AM [PMID: 27257912]

Abd-Elrahman KS, Colinas O, Walsh EJ et al. Abnormal myosin phosphatase targeting subunit 1 phosphorylation and actin polymerization contribute to impaired myogenic regulation of cerebral arterial diameter in the type 2 diabetic Goto-Kakizaki rat. *J. Cereb. Blood Flow Metab.* 2015 Dec 31 [PMID: 26721393] (WB, Rat)

Nishida W, Kitami Y, Abe M, Hiwada K. Gene cloning and nucleotide sequence of SM22 alpha from the chicken gizzard smooth muscle. *Biochem Int* 1991 Mar [PMID: 1872880]

Colinas O, Moreno-Dominguez A, Zhu HL et al. alpha5-Integrin-mediated cellular signaling contributes to the myogenic response of cerebral resistance arteries. *Biochem. Pharmacol.* 2015 Aug 14 [PMID: 26278977] (WB, Rat)

EI-Yazbi AF, Abd-Elrahman KS, Moreno-Dominguez A. PKC-mediated cerebral vasoconstriction: role of myosin light chain phosphorylation versus actin cytoskeleton reorganization *Biochem. Pharmacol.* 2015 Apr 27 [PMID: 25931148] (WB, Rat)

Deng JT, Wang XL, Chen YX et al. The effects of knockdown of rho-associated kinase 1 and zipper-interacting protein kinase on gene expression and function in cultured human arterial smooth muscle cells *PLoS ONE* 2015 Feb 28 [PMID: 25723491] (WB, Human)

### Details:

goat anti-SM-22 antibody used at 1:2500 dilution in WB application for analysis of Transgelin/TAGLN/SM22 alpha protein in lysates of control human Umbilical Artery Smooth Muscle Cells/UASMCs and UASMC 48 h after transfection with siRNAs to ZIPK or ROCK1. SM22 in this assay was used as loading control for the quantitative analysis of IL1 Beta protein (Fig 4A).

More publications at <http://www.novusbio.com/NB600-507>





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### **Products Related to NB600-507**

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NB800-PC1	HeLa Whole Cell Lysate
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF109	Donkey anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
HAF017	Rabbit anti-Goat IgG Secondary Antibody [HRP (Horseradish Peroxidase)]
NB410-28088-1mg	Goat IgG Isotype Control

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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.

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