Product Datasheet

Tenascin C Antibody (4C8MS) - BSA Free
NB110-68136

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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Reviews: 2 Publications: 26

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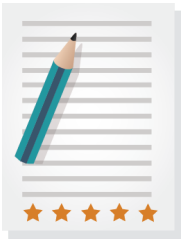
Updated 9/9/2025 v.20.1



NB110-68136

Tenascin C Antibody (4C8MS) - BSA Free

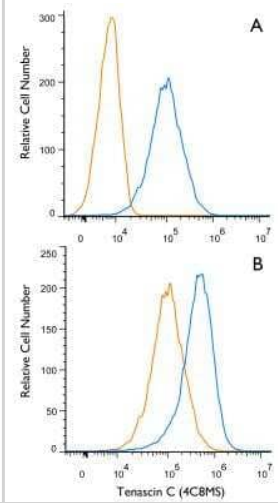
Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Monoclonal
Clone	4C8MS
Preservative	0.02% Sodium Azide
Isotype	IgG1
Purity	Protein A purified
Buffer	PBS

Product Description	
Description	Novus Biologicals Mouse Tenascin C Antibody (4C8MS) - BSA Free (NB110-68136) is a monoclonal antibody validated for use in IHC, WB, ELISA, Flow and ICC/IF. Anti-Tenascin C Antibody: Cited in 26 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Mouse
Gene ID	3371
Gene Symbol	TNC
Species	Human, Mouse, Rat, Feline
Reactivity Notes	Feline reactivity reported in customer review.
Specificity/Sensitivity	NB110-68136 specifically reacts with Domain B on FNIII repeats of Tenascin C.
Immunogen	Recombinant human Tenascin C [Swiss-Prot# P24821].

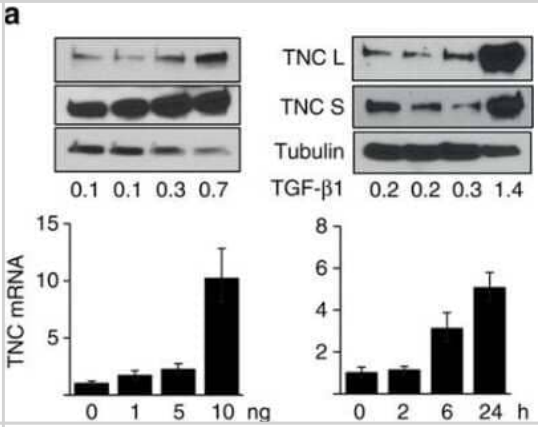
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, ELISA, Flow Cytometry, Flow (Intracellular), Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Frozen, CyTOF-ready
Recommended Dilutions	Western Blot 5 ug/ml, Flow Cytometry 1 ug per million cells, ELISA, Immunohistochemistry 1:50, Immunocytochemistry/ Immunofluorescence 1:10-1:500, Immunohistochemistry-Paraffin 1:50, Immunohistochemistry-Frozen, Flow (Intracellular), CyTOF-ready
Application Notes	For use in IHC-P, it is recommended to incubate primary antibody for at least 2 hours at room temperature followed by ON incubation at 4C. This antibody is CyTOF ready.

Images

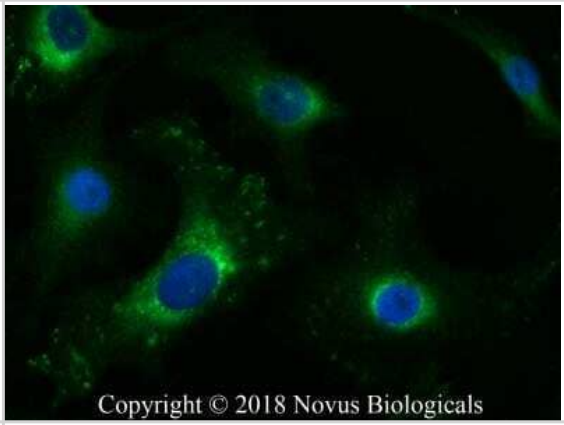
Flow (Intracellular): Tenascin C Antibody (4C8MS) [NB110-68136] - Figure A: Intracellular stain performed on U87MG Cells with Tenascin C (4C8MS) antibody NB110-68136 (blue) and a matched isotype control NBP1-97005 (orange). Cells were fixed with 4% paraformaldehyde, following fixation, cells were permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1 ug/mL for 30 minutes at room temperature, followed by mouse F(ab)2 IgG (H+L) APC-conjugated secondary antibody [F0101B, R&D Systems]. Figure B: U87MG Cells were either untreated (orange) or treated with 3uM Monensin (blue). An intracellular stain was performed with Tenascin C (4C8MS) antibody NB110-68136. Cells were fixed with 4% paraformaldehyde, following fixation, cells were permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1 ug/mL for 30 minutes at room temperature, followed by mouse F(ab)2 IgG (H+L) APC-conjugated secondary antibody [F0101B, R&D Systems].



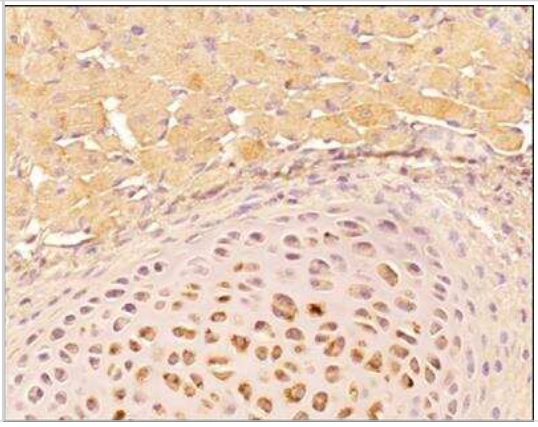
Western Blot: Tenascin C Antibody (4C8MS) [NB110-68136] - Regulation of Tenascin C expression and its effect on fibrotic responses. Confluent foreskin fibroblasts were incubated with TGF-beta (10 ng ml-1 or indicated concentrations) or Tenascin C (TNC) for 24 or 72 h or indicated periods. Whole-cell lysates, culture media and RNA were examined by western analysis (upper panels) and qPCR (lower panel). Representative immunoblots or qPCR results (means+/-s.e.m. of triplicate determinations). S, secreted; L, lysates. Image collected and cropped by CiteAb from the following publication (https://www.nature.com/doifinder/10.1038/ncomms11703), licensed under a CC-BY license.

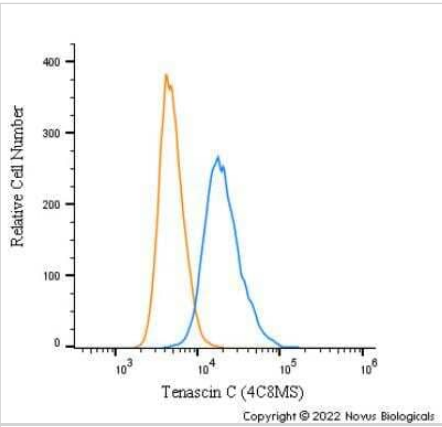
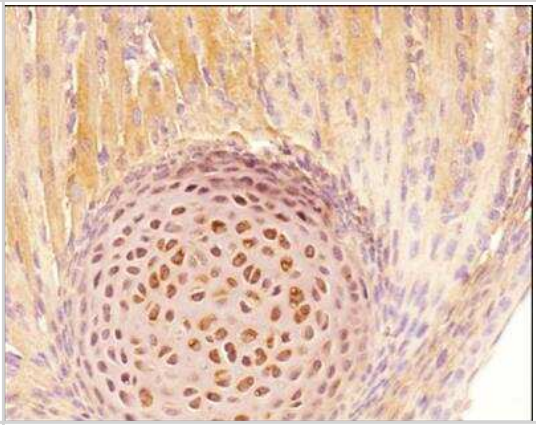
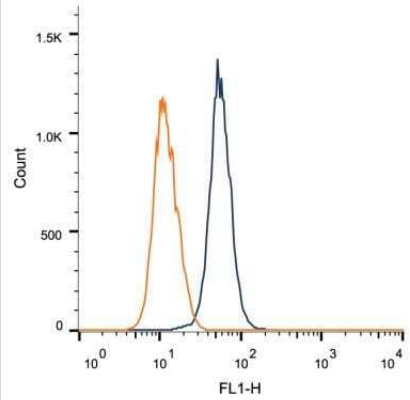
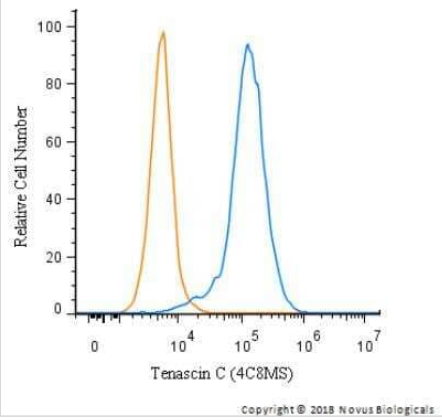


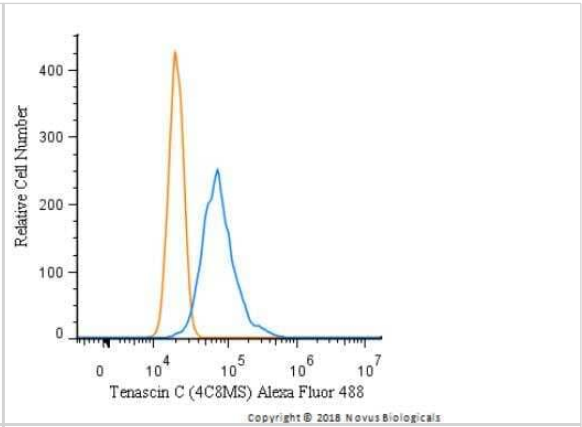
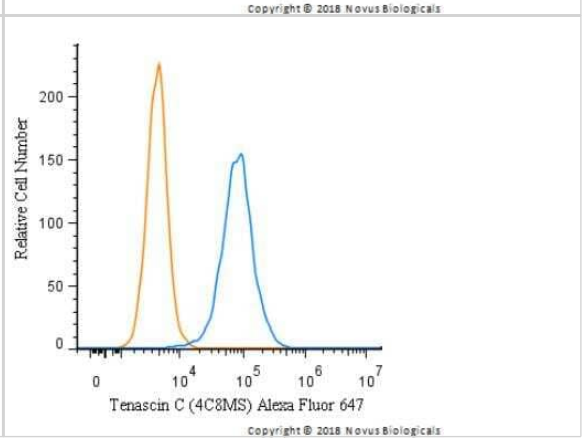
Immunocytochemistry/Immunofluorescence: Tenascin C Antibody (4C8MS) [NB110-68136] - SK-MEL-28 cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.05% Triton-X100. The cells were incubated with anti-Tenascin C at 5 ug/ml overnight at 4C and detected with an anti-Mouse IgG Dylight 488 (Green) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



Immunohistochemistry-Paraffin: Tenascin C Antibody (4C8MS) [NB110-68136] - IHC analysis of a formalin fixed paraffin embedded tissue section of mouse bone-tendon using Tenascin C antibody (clone 4C8MS) at 1:25 dilution. The signal was detected using HRP-DAB detection method which followed counterstaining using hematoxylin. The antibody generated a very specific cytoplasmic, membrane and extra-cellular signal in tendon fibroblasts, osteoblasts, osteoclasts, and some bone marrow cells. The mineralized areas were largely negative for the staining.



Flow Cytometry: Tenascin C Antibody (4C8MS) - BSA Free [NB110-68136] - An intracellular stain was performed on MCF7 cells with Tenascin C Antibody (4C8MS) NB110-68136 (blue) and a matched isotype control MAB002 (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1 ug/mL for 30 minutes at room temperature, followed by Mouse IgG (H+L) Cross-Adsorbed Secondary Antibody, Dylight 550 (84540, Thermo Fisher).	
Immunohistochemistry-Paraffin: Tenascin C Antibody (4C8MS) [NB110-68136] - IHC analysis of a formalin fixed paraffin embedded tissue section of mouse bone-tendon using Tenascin C antibody (clone 4C8MS) at 1:25 dilution. The signal was detected using HRP-DAB detection method which followed counterstaining using hematoxylin. The antibody generated a very specific cytoplasmic, membrane and extra-cellular signal in tendon fibroblasts, osteoblasts, osteoclasts, and some bone marrow cells. The mineralized areas were largely negative for the staining.	
Flow Cytometry: Tenascin C Antibody (4C8MS) [NB110-68136] - Intracellular flow cytometric staining of 1 x 10^6 MCF-7 cells using Tenascin C antibody (dark blue). Isotype control shown in orange. An antibody concentration of 1 ug/1x10^6 cells was used.	
Flow Cytometry: Tenascin C Antibody (4C8MS) [NB110-68136] - An intracellular stain was performed on SK-MEL-28 cells with Tenascin C Antibody (4C8MS) NB110-68136 and a matched isotype control. Cells were fixed with 4% PFA and then permeablized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature, followed by mouse F(ab)2 IgG (H+L) APC-conjugated secondary antibody (F0101B, R&D Systems).	

Flow Cytometry: Tenascin C Antibody (4C8MS) [NB110-68136] - An intracellular stain was performed on SK-MEL-28 cells with Tenascin C Antibody (4C8MS) NB110-68136AF488 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 488.	
Flow Cytometry: Tenascin C Antibody (4C8MS) [NB110-68136] - An intracellular stain was performed on SK-MEL-28 cells with Tenascin C Antibody [4C8MS] NB110-68136AF647 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to Alexa Fluor 647.	

Publications

Li J, Sina AAI, Antaw F et al. Digital Decoding of Single Extracellular Vesicle Phenotype Differentiates Early Malignant and Benign Lung Lesions Advanced science (Weinheim, Baden-Wurttemberg, Germany) 2022-11-17 [PMID: 36394090] (FLOW, Human)

Ni Y, Wu GH, Cai JJ et al. Tubule-mitophagic secretion of SerpinG1 reprograms macrophages to instruct anti-septic acute kidney injury efficacy of high-dose ascorbate mediated by NRF2 transactivation International journal of biological sciences 2022-08-08 [PMID: 35982894] (WB)

Louisthelmy R, Burke BM, Cornelison RC Brain cancer cell-derived matrices and effects on astrocyte migration Cells, tissues, organs 2022-02-15 [PMID: 35168244]

Dorchin-Ashkenazi H, Ginat-Koton R, Gabet Y et al. The Balance between Orthodontic Force and Radiation in the Jawbone: Microstructural, Histological, and Molecular Study in a Rat Model Biology (Basel) 2021-11-18 [PMID: 34827196] (IHC-P, Rat)

Otsuka T, Mengsteab PY, Laurencin CT Control of mesenchymal cell fate via application of FGF-8b in vitro Stem cell research 2021-01-07 [PMID: 33445073] (ICC/IF, Rat)

Lee Y, Ricky S, Lim TH, et al. An atmospheric plasma jet induces expression of wound healing genes in progressive burn wounds in a comb burn rat model: a pilot study Journal of burn care & research : official publication of the American Burn Association 2021-01-22 [PMID: 33482000]

Bhattacharyya S, Wang W, Morales-Nebreda L et al. Tenascin-C drives persistence of organ fibrosis. Nat Commun 2016-06-06 [PMID: 27256716] (WB, Human)

Haydont V, Neiveyans V, Perez P et al. Fibroblasts from the Human Skin Dermo-Hypodermal Junction are Distinct from Dermal Papillary and Reticular Fibroblasts and from Mesenchymal Stem Cells and Exhibit a Specific Molecular Profile Related to Extracellular Matrix Organization and Modeling Cells 2020-02-05 [PMID: 32033496] (IF/IHC, Human)

Ishikawa K, Kohno RI, Mori K Increased expression of periostin and tenascin-C in eyes with neovascular glaucoma secondary to PDR Graefes Arch. Clin. Exp. Ophthalmol. 2019-12-20 [PMID: 31863397]

Becerril S, Rodriguez A, Catalan V, Mendez-Gimenez L. Targeted disruption of the iNOS gene improves adipose tissue inflammation and fibrosis in leptin-deficient ob/ob mice: role of tenascin C. Int J Obes (Lond). 2018-02-15 [PMID: 29449623] (IF/IHC, Mouse)

Janune D, Abd El Kader T, Aoyama E et al. Novel role of CCN3 that maintains the differentiated phenotype of articular cartilage. J. Bone Miner. Metab. 2016-11-16 [PMID: 27853940] (WB, Rat)

de Sousa AP, Gurgel CA, Ramos EA et al. Infrared LED light therapy influences the expression of fibronectin and tenascin in skin wounds of malnourished rats-A preliminary study. Acta Histochem. 2014-07-12 [PMID: 25028133] (IHC-P, Rat, Human)

Details:
Tenascin C antibody used for IHC-P on skin wounds of malnourished male albino Wistar rats (Rattus norvegicus) - antigen retreival using 1% trypsin solution at 37C for 30 min, primary incubation 60 minutes at 1:50 dilution, detection using EnVision(TM) Polymer - DAB, sections of human placenta tissue used as positive control (Fig 1).

More publications at http://www.novusbio.com/NB110-68136

Procedures

Immunohistochemistry-Paraffin Embedded Sections Protocol Specific for NB110-68136: Tenascin C Antibody (4C8MS)

Immunohistochemistry-Paraffin Embedded Sections for NB110-68136

Antigen Unmasking:
Bring slides to a boil in 10 mM sodium citrate buffer (pH 6.0) then maintain at a sub-boiling temperature for 10 minutes. Cool slides on bench-top for 30 minutes.

Staining:
1. Wash sections in deionized water three times for 5 minutes each.
2. Wash sections in wash buffer for 5 minutes.
3. Block each section with 100-400 ul blocking solution for 1 hour at room temperature.
4. Remove blocking solution and add 100-400 ul diluted primary antibody. Incubate overnight at 4C.
5. Remove antibody solution and wash sections in wash buffer three times for 5 minutes each.
6. Add 100-400 ul biotinylated diluted secondary antibody. Incubate 30 minutes at room temperature.
7. Remove secondary antibody solution and wash sections three times with wash buffer for 5 minutes each.
8. Add 100-400 ul Streptavidin-HRP reagent to each section and incubate for 30 minutes at room temperature.
9. Wash sections three times in wash buffer for 5 minutes each.
10. Add 100-400 ul DAB substrate to each section and monitor staining closely.
11. As soon as the sections develop, immerse slides in deionized water.
12. Counterstain sections in hematoxylin.
13. Wash sections in deionized water two times for 5 minutes each.
14. Dehydrate sections.
15. Mount coverslips.

*The above information is only intended as a guide. The researcher should determine what protocol best meets their needs. Please follow safe laboratory procedures.

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Products Related to NB110-68136

NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF007	Goat anti-Mouse IgG Secondary Antibody [HRP]
NB7539	Goat anti-Mouse IgG (H+L) Secondary Antibody [HRP]
NBP1-97005-0.5mg	Mouse IgG1 Isotype Control (MG1)

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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