Product Datasheet

SOX2 Antibody - BSA Free
NB110-37235

Unit Size: 0.1 ml

Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.

www.novusbio.com technical@novusbio.com

Reviews: 4 Publications: 38

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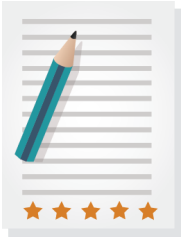
Updated 9/9/2025 v.20.1



NB110-37235

SOX2 Antibody - BSA Free

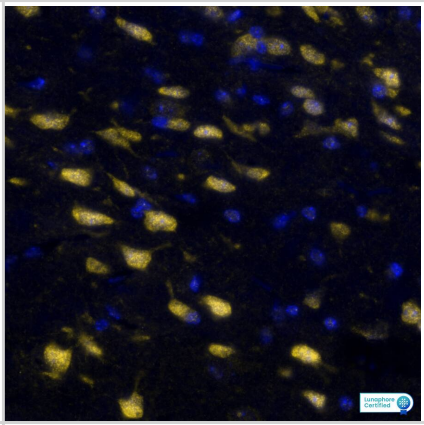
Product Information	
Unit Size	0.1 ml
Concentration	1.0 mg/ml
Storage	Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS

Product Description	
Description	Novus Biologicals Rabbit SOX2 Antibody - BSA Free (NB110-37235) is a polyclonal antibody validated for use in Multiplex Immunofluorescence, IHC, WB, Flow and ICC/IF. Anti-SOX2 Antibody: Cited in 37 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
Host	Rabbit
Gene ID	6657
Gene Symbol	SOX2
Species	Human, Mouse, Rat, Canine, Sheep
Reactivity Notes	Canine reactivity reported in scientific literature (PMID: 31690408).
Marker	Embryonic Stem Cell Marker
Immunogen	A synthetic peptide made to the N-terminal region of human SOX2 protein (within residues 1-100). [Swiss-Prot# P48431]

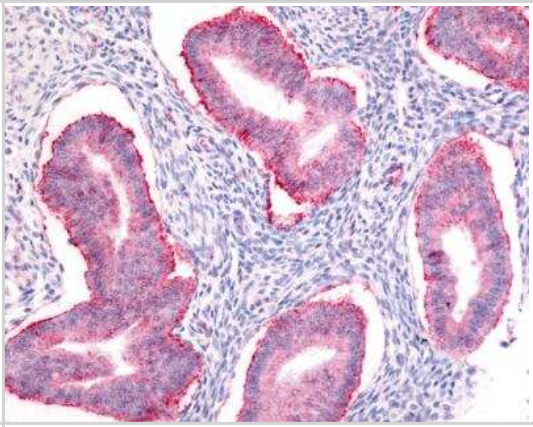
Product Application Details	
Applications	Western Blot, Immunohistochemistry-Paraffin, Flow Cytometry, Flow (Intracellular), Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Multiplex Immunofluorescence
Recommended Dilutions	Western Blot 0.5 ug/mL, Flow Cytometry 1:100, Immunohistochemistry 1:125 - 1:250, Immunocytochemistry/ Immunofluorescence 1:50 - 1:250, Immunohistochemistry-Paraffin 1:125 - 1:250, Flow (Intracellular) 1:100, Multiplex Immunofluorescence 1:125
Application Notes	This SOX2 antibody is useful for Flow Cytometry, Immunocytochemistry/Immunofluorescence, Immunohistochemistry paraffin embedded sections and Western Blot analysis, where a band is observed at ~40 kDa representing the SOX2 protein.

Images

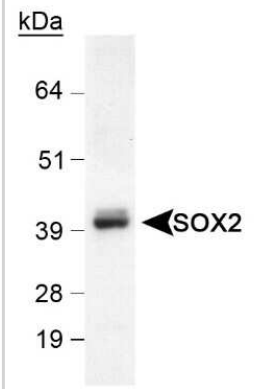
SOX2 Antibody was detected in immersion fixed paraffin-embedded sections of mouse Brain Cortex using Rabbit Anti-Mouse SOX2, Monoclonal Antibody (Catalog # NB110-37235) at 1:125 dilution at 37 ° Celsius for 4 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; Epredia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ Plus 647 Goat anti-Rabbit IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR647RB) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the nucleus and cytoplasm. Protocol available in COMET™ Panel Builder.



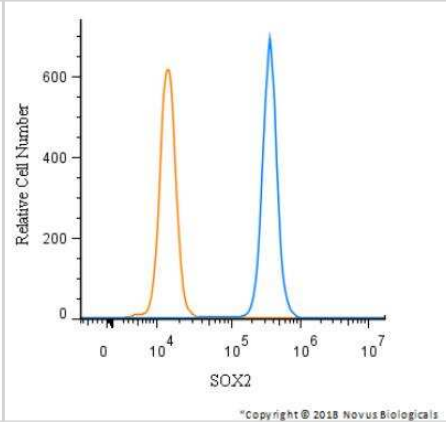
Immunohistochemistry-Paraffin: SOX2 Antibody [NB110-37235] - Staining of human uterus, endometrial glands.



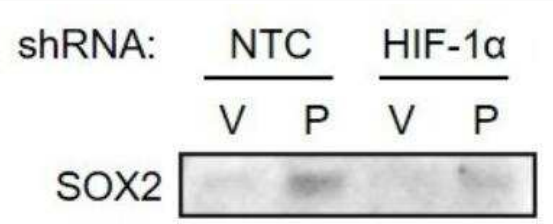
Western Blot: SOX2 Antibody [NB110-37235] - Detection of SOX2 in mouse brain lysate using NB110-37235 at 0.5 ug/mL.



Flow Cytometry: SOX2 Antibody [NB110-37235] - An intracellular stain was performed on A549 with NB110-37235 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 Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Dylgiht 550.

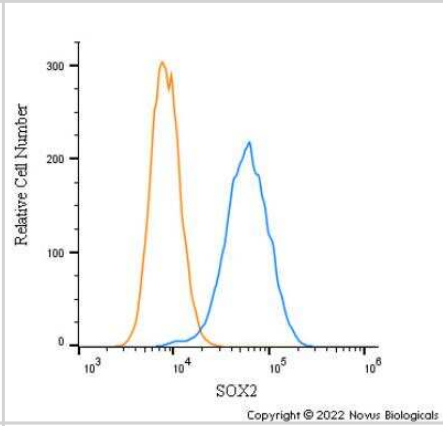


Western Blot: SOX2 Antibody [NB110-37235] - MDA-MB-231 subclones transfected with NTC or HIF-1 alpha shRNA vector were treated with vehicle (V) or paclitaxel (P) and immunoblot assay was performed. WB image submitted by a verified customer review.

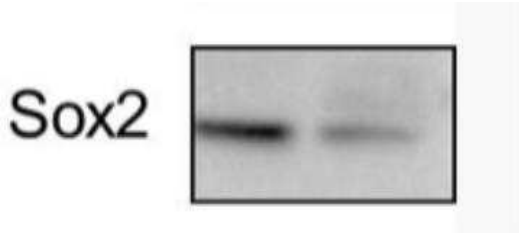


Immunocytochemistry/Immunofluorescence: SOX2 Antibody - BSA Free [NB110-37235] - Rat FR cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.5% Triton X-100 in PBS for 5 minutes. The cells were incubated with SOX2 Antibody (NB110-37235) at 2ug/ml overnight at 4C and detected with an anti-rabbit DyLight 488 (Green) at a 1:1000 dilution for 60 minutes. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.

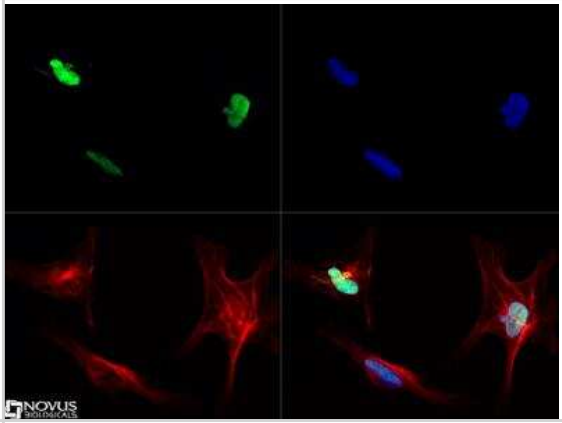
Flow Cytometry: SOX2 Antibody - BSA Free [NB110-37235] - An intracellular stain was performed on U-251 MG cells with SOX2 Antibody NB110-37235 (blue) and a matched isotype control NBP2-24891 (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 2.5 ug/mL for 30 minutes at room temperature, followed by Rabbit IgG (H+L) Cross-Adsorbed Secondary Antibody, Dylight 550 (SA5-10033, Thermo Fisher).



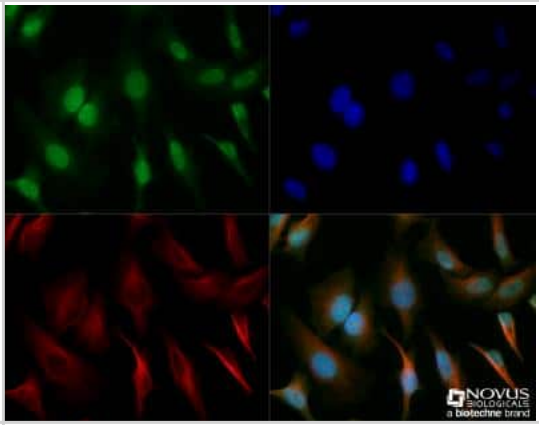
Western Blot: SOX2 Antibody [NB110-37235] - Expression of pluripotency factor Sox2 in human head and neck cancer cell lines FaDu and HN5. WB image submitted by a verified customer review.



Immunocytochemistry/Immunofluorescence: SOX2 Antibody [NB110-37235] - Staining of SOX2 in NTERA2 cells with Dylight 488 (Green). Alpha-tubulin and nuclei were counterstained with Dylight 550 (Red) and DAPI (Blue), respectively.



Immunocytochemistry/Immunofluorescence: SOX2 Antibody [NB110-37235] - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X TBS + 0.5% Triton X-100. The cells were incubated with anti-SOX2 (NB110-37235) at a 1:200 dilution overnight at 4C and detected with an anti-rabbit Dylight 488 (Green) at a 1:500 dilution. Alpha tubulin was used as a co-stain at a 1:1000 dilution and detected with and anti-mouse Dylight 550 (Red) at a 1:500 dilution. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



Immunocytochemistry/Immunofluorescence: SOX2 Antibody - BSA Free [NB110-37235] - NIH3T3 cells were fixed in 4% paraformaldehyde for 10 minutes and permeabilized in 0.5% Triton X-100 in PBS for 5 minutes. The cells were incubated with SOX2 Antibody (NB110-37235) at 2ug/ml overnight at 4C and detected with an anti-rabbit DyLight 488 (Green) at a 1:1000 dilution for 60 minutes. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.

Publications

Siu WS, Ma H, Ko CH et al. Rat Plantar Fascia Stem/Progenitor Cells Showed Lower Expression of Ligament Markers and Higher Pro-Inflammatory Cytokines after Intensive Mechanical Loading or Interleukin-1? Treatment In Vitro Cells 2023-09-06 [PMID: 37759446] (Immunohistochemistry, Human)

Huan Y, Wu XQ, Chen T et al. Necroptosis plays a crucial role in the exacerbation of retinal injury after blunt ocular trauma Neural Regeneration Research 2023-01-01 [PMID: 36204864] (Immunohistochemistry, Human)

Krebs AM, Mitschke J, Lasierra Losada M et al. The EMT-activator Zeb1 is a key factor for cell plasticity and promotes metastasis in pancreatic cancer Nature Cell Biology 2017-05-01 [PMID: 28414315] (Immunohistochemistry, Human)

Zhigalina DI, Malakhova AA, Vasilyeva OY, Grigor'eva EV et Al. Generation of an induced pluripotent stem cell line ICGi030-A from a Wilson's disease patient carrying a frameshift mutation p.Lys1013fs and missense mutation p.H1069Q in the ATP7B gene Stem Cell Res 2021-11-04 [PMID: 34736038]

Cesare E, Urciuolo A, Stuart H et al. 3D ECM-rich environment sustains the identity of naive human iPSCs Cell Stem Cell 2022-12-01 [PMID: 36459970]

Wei Q, Liu Z, Zhu J et Al. The Ubiquitin E3 Ligase FBXO33 Suppresses Stem Cell-Like Properties and Metastasis in Non-Small-Cell Lung Cancer by Promoting Ubiquitination and Degradation of Myc Front Biosci (Landmark Ed) 2024-08-29 [PMID: 39206900]

Filidou E, Kandilogiannakis L, Tarapatzi G et al. A Simplified and Effective Approach for the Isolation of Small Pluripotent Stem Cells Derived from Human Peripheral Blood Biomedicines 2023-03-05 [PMID: 36979766] (Immunocytochemistry/ Immunofluorescence, Human)

Erda? E, Emekli A, G□nd□z T et al. Serum IgG of patients with relapsing inflammatory optic neuropathy immunoreacts with Sox2-positive glial cells of the optic nerve Multiple Sclerosis and Related Disorders 2023-03-01 [PMID: 37023542]

Haiquan Lu, Yajing Lyu, Linh Tran, Jie Lan, Yangyiran Xie, Yongkang Yang, Naveena L Murugan, Yueyang J Wang, Gregg L Semenza HIF-1 recruits NANOG as a coactivator for TERT gene transcription in hypoxic breast cancer stem cells. Cell reports 2022-02-10 [PMID: 34592152]

B Li, W W Xu, L Han, K T Chan, S W Tsao, N P Y Lee, S Law, L Y Xu, E M Li, K W Chan, Y R Qin, X Y Guan, Q Y He, A L M Cheung MicroRNA-377 suppresses initiation and progression of esophageal cancer by inhibiting CD133 and VEGF Oncogene 2017-07-13 [PMID: 28288140]

Kim JT, Cho SM, Youn DH et al. Therapeutic effect of a hydrogel-based neural stem cell delivery sheet for mild traumatic brain injury Acta biomaterialia 2023-06-23 [PMID: 37356785] (Immunohistochemistry, Mouse)

Yang Y, Chen C, Zuo Q Et al. NARF is a hypoxia-induced coactivator for OCT4-mediated breast cancer stem cell specification Sci Adv 2022-12-09 [PMID: 36490339] (WB, Human)

Details:
Citation using the DyLight 405 version of this antibody.

More publications at http://www.novusbio.com/NB110-37235

Procedures

Immunohistochemistry-Paraffin Protocol for SOX2 Antibody (NB110-37235)
Immunohistochemistry-Paraffin Embedded Sections

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 (keep slides in the sodium citrate buffer all the time).

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

Western Blot Protocol for SOX2 Antibody (NB110-37235)
Western Blot Protocol

1. Perform SDS-PAGE on samples to be analyzed, loading 10-25 ug of total protein per lane.
2. Transfer proteins to PVDF membrane according to the instructions provided by the manufacturer of the membrane and transfer apparatus.
3. Stain the membrane with Ponceau S (or similar product) to assess transfer success, and mark molecular weight standards where appropriate.
4. Rinse the blot TBS -0.05% Tween 20 (TBST).
5. Block the membrane in 5% Non-fat milk in TBST (blocking buffer) for at least 1 hour.
6. Wash the membrane in TBST three times for 10 minutes each.
7. Dilute primary antibody in blocking buffer and incubate overnight at 4C with gentle rocking.
8. Wash the membrane in TBST three times for 10 minutes each.
9. Incubate the membrane in diluted HRP conjugated secondary antibody in blocking buffer (as per manufacturer's instructions) for 1 hour at room temperature.
10. Wash the blot in TBST three times for 10 minutes each (this step can be repeated as required to reduce background).
11. Apply the detection reagent of choice in accordance with the manufacturers instructions.

Immunocytochemistry/ Immunofluorescence Protocol for SOX2 Antibody (NB110-37235)
Immunocytochemistry Protocol

Culture cells to appropriate density in 35 mm culture dishes or 6-well plates.

1. Remove culture medium and wash the cells briefly in PBS. Add 10% formalin to the dish and fix at room temperature for 10 minutes.
2. Remove the formalin and wash the cells in PBS.
3. Permeablize the cells with 0.1% Triton X100 or other suitable detergent for 10 min.
4. Remove the permeablization buffer and wash three times for 10 minutes each in PBS. Be sure to not let the specimen dry out.
5. To block nonspecific antibody binding, incubate in 10% normal goat serum from 1 hour to overnight at room temperature.
6. Add primary antibody at appropriate dilution and incubate overnight at 4C.
7. Remove primary antibody and replace with PBS. Wash three times for 10 minutes each.
8. Add secondary antibody at appropriate dilution. Incubate for 1 hour at room temperature.
9. Remove secondary antibody and replace with PBS. Wash three times for 10 minutes each.
10. Counter stain DNA with DAPi if required.

Novus Biologicals USA
10730 E. Briarwood Avenue
Centennial, CO 80112
USA
Phone: 303.730.1950
Toll Free: 1.888.506.6887
Fax: 303.730.1966
nb-customerservice@bio-techne.com

Bio-Techne Canada
21 Canmotor Ave
Toronto, ON M8Z 4E6
Canada
Phone: 905.827.6400
Toll Free: 855.668.8722
Fax: 905.827.6402
canada.inquires@bio-techne.com

Bio-Techne Ltd
19 Barton Lane
Abingdon Science Park
Abingdon, OX14 3NB, United Kingdom
Phone: (44) (0) 1235 529449
Free Phone: 0800 37 34 15
Fax: (44) (0) 1235 533420
info.EMEA@bio-techne.com

General Contact Information
www.novusbio.com
Technical Support: nb-technical@bio-techne.com
Orders: nb-customerservice@bio-techne.com
General: novus@novusbio.com

Products Related to NB110-37235

NB820-59657	Mouse Brain Whole Tissue Lysate (Adult Whole Normal)
NB110-37235PEP	SOX2 Antibody Blocking Peptide
NBP2-33376H	Blue Marker Antibody (6F4-F6) [HRP]
HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit 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.

For more information on our 100% guarantee, please visit www.novusbio.com/guarantee

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