

# Product Datasheet

## NKX3.1 Antibody (0361) - BSA Free NB100-1828

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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Updated 9/9/2025 v.20.1

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**NB100-1828**

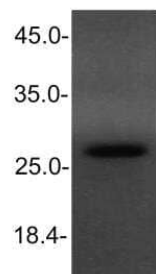
NKX3.1 Antibody (0361) - BSA Free

<b>Product Information</b>	
<b>Unit Size</b>	0.1 ml
<b>Concentration</b>	2.0 mg/ml
<b>Storage</b>	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
<b>Clonality</b>	Monoclonal
<b>Clone</b>	0361
<b>Preservative</b>	0.1% Sodium Azide
<b>Isotype</b>	IgG1
<b>Purity</b>	Protein G purified
<b>Buffer</b>	PBS
<b>Product Description</b>	
<b>Description</b>	Novus Biologicals Mouse NKX3.1 Antibody (0361) - BSA Free (NB100-1828) is a monoclonal antibody validated for use in IHC, WB and IP. Anti-NKX3.1 Antibody: Cited in 6 publications. All Novus Biologicals antibodies are covered by our 100% guarantee.
<b>Host</b>	Mouse
<b>Gene ID</b>	4824
<b>Gene Symbol</b>	NKX3-1
<b>Species</b>	Human, Mouse, Rat
<b>Reactivity Notes</b>	Predicted to work in human based on 100% sequence homology. Human reactivity reported in scientific literature (PMID: 22465996).
<b>Immunogen</b>	Full-length human Nkx3.1 produced in bacteria as a hexahistidine-tagged protein. [UniProt# Q99801]
<b>Product Application Details</b>	
<b>Applications</b>	Western Blot, Immunohistochemistry-Paraffin, Immunohistochemistry, Immunohistochemistry-Frozen, Immunoprecipitation, Knockdown Validated
<b>Recommended Dilutions</b>	Western Blot 2 ug/ml, Immunohistochemistry 1:100, Immunoprecipitation 1:10-1:500, Immunohistochemistry-Paraffin 1:100, Immunohistochemistry-Frozen 1:100, Knockdown Validated
<b>Application Notes</b>	This Nkx3.1 antibody is useful for Immunohistochemistry frozen and paraffin embedded sections, Immunoprecipitation and Western Blot.

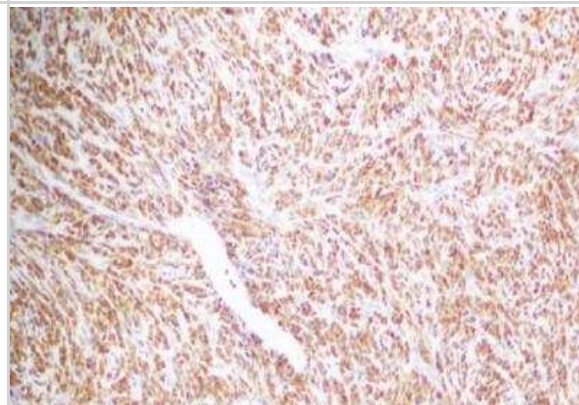


## Images

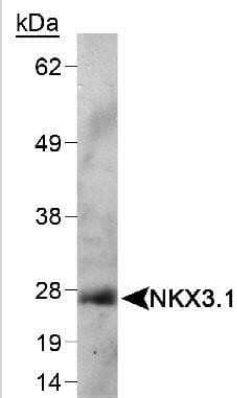
Western Blot: NKX3.1 Antibody (0361) [NB100-1828] - Analysis of NKX3.1 in HeLa cell lysate using anti-NKX3.1 antibody. WB image submitted by a verified customer review.



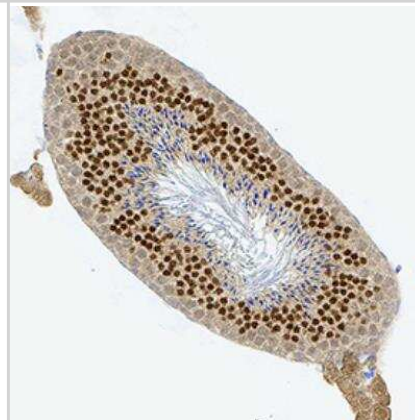
Immunohistochemistry-Paraffin: NKX3.1 Antibody (0361) [NB100-1828] - Staining of human chondrosarcoma tissue with NKX3.1 monoclonal antibody. IHC-P image submitted by a verified customer review.



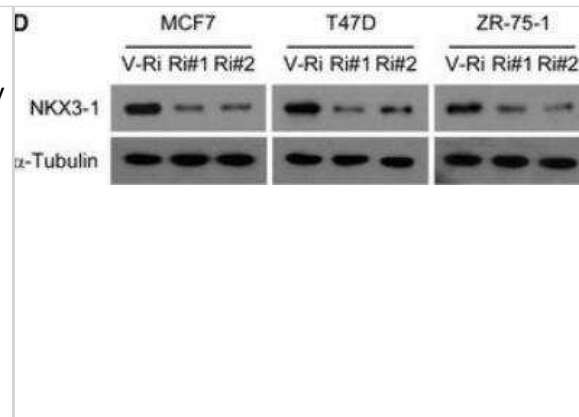
Western Blot: Nkx3.1 Antibody (0361) [NB100-1828] - Detection of NKX3.1 in mouse testis lysate using NB 100-1828. ECL detection 1 minute.



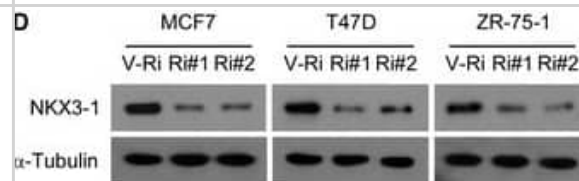
Immunohistochemistry-Paraffin: NKX3.1 Antibody (0361) [NB100-1828] - NKX3.1 was detected in immersion fixed paraffin-embedded sections of mouse testis using Mouse Anti-Mouse NKX3.1 (0361) Monoclonal Antibody (Catalog # NB100-1828) at 1:300 for 1 hour at room temperature followed by incubation with the Anti-Mouse IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC001). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to the nuclei in sperm cells.



Western Blot: NKX3.1 Antibody (0361) [NB100-1828] - DWB analysis of NKX3.1 expression in the indicated cells transfected with Ri-Vector (V-Ri) or shRNAs (Ri#1/2) against NKX3.1. Image collected and cropped by CiteAb from the following publication (<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6895605/>) licensed under a CC-BY license.



Western Blot: NKX3.1 Antibody (0361) - BSA Free [NB100-1828] - SALL2 transcriptionally upregulates ESR1 in breast cancer RNA-seq analysis of ESR1 mRNA levels in 9 paired pre-tamoxifen-treated primary breast cancer tissues & relapsed tamoxifen-resistant breast cancer tissues. qRT-PCR analysis of ESR1 expression in 9 paired pre-tamoxifen-treated primary breast cancer tissues & relapsed tamoxifen-resistant breast cancer tissues. GAPDH was used as an internal control. C, DWB analysis of SALL2 (A) & NKX3.1 (B) expression in the indicated cells transfected with Ri-Vector (V-Ri) or shRNAs (Ri#1/2) against SALL2 or NKX3.1.  $\alpha$ -Tubulin was used as the loading control. E, qRT-PCR analysis of ESR1 expression in the indicated cells transfected with Ri-Vector or shRNAs (Ri#1/2) against SALL2 or NKX3.1. Data information: In (A), P-values were determined by two-tailed paired Student's t-test. In (B), data are presented as mean  $\pm$  SD, & P-values were determined by two-tailed unpaired Student's t-test, n = 3. In (E & F), data are presented as mean  $\pm$  SD, & P-values were determined by one-way ANOVA test, n = 3. \*P < 0.05, \*\*P < 0.01, \*\*\*P < 0.001, n.s., no significance. Exact P-values are specified in Appendix Table S10. Source data are available online for this figure. Image collected & cropped by CiteAb from the following publication (<https://pubmed.ncbi.nlm.nih.gov/31657150/>), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



## Publications

Ye L, Lin C, Wang X et al. Epigenetic silencing of SALL2 confers tamoxifen resistance in breast cancer EMBO Mol Med 2019-10-28 [PMID: 31657150] (WB, Human)

Blee AM, He Y, Yang Y et al. TMPRSS2-ERG controls luminal epithelial lineage and antiandrogen sensitivity in PTEN and TP53-mutated prostate cancer Clin. Cancer Res. 2018-05-29 [PMID: 29844131] (Mouse)

Zhong J, Ding L, Bohrer LR et al. p300 Acetyltransferase Regulates Androgen Receptor Degradation and PTEN-Deficient Prostate Tumorigenesis. Cancer Res. 2014-03-06 [PMID: 24480624] (IHC-P, Mouse)

Gao, H et al. A critical role for p27kip1 gene dosage in a mouse model of prostate carcinogenesis. Proc Natl Acad Sci U S A;101(49):17204-9. 2004-12-07 [PMID: 15569926] (IHC-P, Mouse)

Kim, MJ et al. Cooperativity of Nkx3.1 and Pten loss of function in a mouse model of prostate carcinogenesis. Proc Natl Acad Sci U S A. 99(5):2884-9. 2002-03-05 [PMID: 11854455] (WB, IHC-P, Mouse)

Zhou J, Qin L, Tien JC, Gao L, Chen X, Wang F, Hsieh JT, Xu J. Nkx3.1 Functions as Para-transcription Factor to Regulate Gene Expression and Cell Proliferation in Non-cell Autonomous Manner. J Biol Chem;287(21):17248-56. 2012-05-18 [PMID: 22465996] (WB, Human, Rat)

## Procedures

### Western Blot protocol for NKX3.1 Antibody (NB100-1828)

NKX3.1 Antibody (0361):

Western Blot Protocol

1. Perform SDS-PAGE (4-12%) on samples to be analyzed, loading 40 ug of total protein per lane.
2. Transfer proteins to Nitrocellulose according to the instructions provided by the manufacturer of the transfer apparatus.
3. Rinse membrane with dH<sub>2</sub>O and then stain the blot using ponceau S for 1-2 minutes to access the transfer of proteins onto the nitrocellulose membrane. Rinse the blot in water to remove excess stain and mark the lane locations and locations of molecular weight markers using a pencil.
4. Rinse the blot in TBS for approximately 5 minutes.
5. Block the membrane using 5% non-fat dry milk + 1% BSA in TBS for 2 hours at room temperature.
6. Rinse the membrane in dH<sub>2</sub>O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
7. Dilute the mouse anti-Nkx3.1 primary antibody (NB 100-1828) in blocking buffer and incubate 1 hour at room temperature.
8. Rinse the membrane in dH<sub>2</sub>O and then wash the membrane in wash buffer [TBS + 0.1% Tween] 3 times for 10 minutes each.
9. Apply the diluted mouse-IgG HRP-conjugated secondary antibody in blocking buffer (as per manufacturer's instructions) and incubate 1 hour at room temperature.
10. Wash the blot in wash buffer [TBS + 0.1% Tween] 3 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 manufacturer's instructions (Pierce's ECL).

Note: Tween-20 can be added to the blocking or antibody dilution buffer at a final concentration of 0.05-0.2%, provided it does not interfere with antibody-antigen binding.





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### **Products Related to NB100-1828**

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NB820-59672	Mouse Testis Whole Tissue Lysate (Adult Whole Normal)
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)

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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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