# **Product Datasheet**

# WDHD1 Antibody - BSA Free NBP1-89091

Unit Size: 0.1 ml

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

www.novusbio.com



technical@novusbio.com

Reviews: 1 Publications: 6

Protocols, Publications, Related Products, Reviews, Research Tools and Images at: www.novusbio.com/NBP1-89091

Updated 2/21/2025 v.20.1

Earn rewards for product reviews and publications.

Submit a publication at www.novusbio.com/publications
Submit a review at www.novusbio.com/reviews/destination/NBP1-89091



## NBP1-89091

WDHD1 Antibody - BSA Free

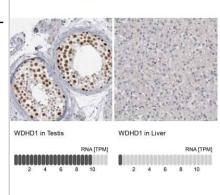
,	
<b>Product Information</b>	
Unit Size	0.1 ml
Concentration	Concentrations vary lot to lot. See vial label for concentration. If unlisted please contact technical services.
Storage	Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.
Clonality	Polyclonal
Preservative	0.02% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	PBS (pH 7.2) and 40% Glycerol
Target Molecular Weight	126 kDa
Product Description	

<b>Product Description</b>	
Host	Rabbit
Gene ID	11169
Gene Symbol	WDHD1
Species	Human, Mouse, Rat
Immunogen	This antibody was developed against Recombinant Protein corresponding to amino acids: QTLNIVTWSPCGQYLAAGSINGLIIVWNVETKDCMERVKHEKGYAICGLAWHPT CGRISYTDAEGNLGLLENVCDPSGKTSSSKVSSRVEKDYNDLFDGDDMSNAG DFLNDNAVE

<b>Product Application Details</b>	
Applications	Western Blot, Immunocytochemistry/ Immunofluorescence, Immunohistochemistry, Immunohistochemistry-Paraffin
Recommended Dilutions	Western Blot 0.04-0.4 µg/ml, Immunohistochemistry 1:50 - 1:200, Immunocytochemistry/ Immunofluorescence 0.25-2 ug/ml, Immunohistochemistry-Paraffin 1:50-1:200
Application Notes	For IHC-Paraffin, HIER pH 6 retrieval is recommended. ICC/IF Fixation Permeabilization, Use PFA/Triton X-100.

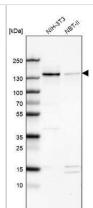
## **Images**

Immunohistochemistry-Paraffin: WDHD1 Antibody [NBP1-89091] - Staining in human testis and liver tissues.. Corresponding WDHD1 RNA-seq data are presented for the same tissues.

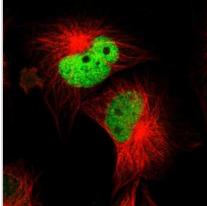




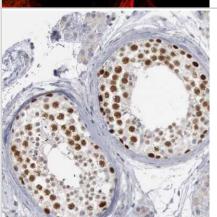
Western Blot: WDHD1 Antibody [NBP1-89091] - Analysis in mouse cell line NIH-3T3 and rat cell line NBT-II.



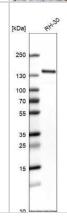
Immunocytochemistry/Immunofluorescence: WDHD1 Antibody [NBP1-89091] - Staining of human cell line U-251 MG shows localization to nucleoplasm. Antibody staining is shown in green.



Immunohistochemistry-Paraffin: WDHD1 Antibody [NBP1-89091] - Staining of human testis shows nuclear positivity in cells in seminiferous ducts.



Western Blot: WDHD1 Antibody [NBP1-89091] - Analysis in human cell line RH-30.



Western Blot: WDHD1 Antibody [NBP1-89091] - The interaction of Flag-WDHD1 mvc-WDHD DDX11 with WDHD1 does not depend on FeS cluster binding. Reciprocal co-immunoprecipitations of Flag-tagged WDHD1 and WB: WDHD WB: WDHD untagged DDX11, and Flag-tagged DDX11 and myc-tagged WDHD1, WB: DDX11 WB: DDX11 respectively, extracted from 293T cells. Image collected and cropped by CiteAb from the following publication (https://www.life-sciencealliance.org/lookup/doi/10.26508/lsa.201900547), licensed under a CC-BY license. Immunohistochemistry-Paraffin: WDHD1 Antibody [NBP1-89091] -Staining of human liver shows no positivity in hepatocytes. Immunohistochemistry-Paraffin: WDHD1 Antibody [NBP1-89091] -Staining of human lymph node shows strong nuclear positivity in germinal center cells. Immunohistochemistry-Paraffin: WDHD1 Antibody [NBP1-89091] -Staining of human rectum shows strong nuclear positivity in glandular cells.

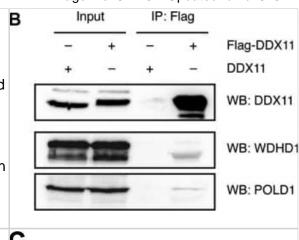


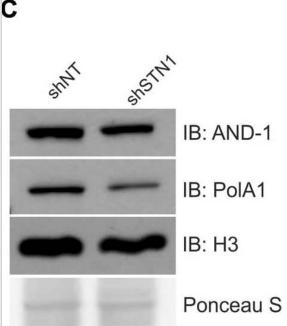
Western Blot: WDHD1 Antibody [NBP1-89091] - DDX11 interacts with Pol δ independently of its FeS cluster.(A) Gene Ontology term enrichment analysis of interaction partners obtained upon pull-down of YFP-DDX11 from HeLa Flp-In T-REx cells. (B) Flag pull-down of over-expressed Flag-tagged DDX11 from 293T cells & co-immunoprecipitated endogenous proteins. (C) Reciprocal co-immunoprecipitations of Flag-tagged POLD1 & untagged DDX11, & Flag-tagged DDX11 & untagged POLD1, respectively, extracted from 293T cells. (D) Co-immunoprecipitations of Flag-tagged DDX11 variants & untagged POLD1 from 293T cells. See also Fig S3, Tables S1, & S2. WB, Western blot. Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/32071282), licensed under a CC-BY license. Not internally tested by Novus Biologicals.

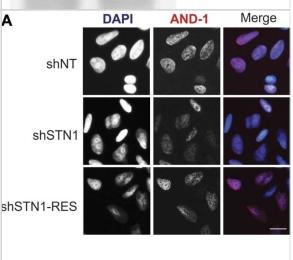
Western Blot: WDHD1 Antibody [NBP1-89091] - CST is required for AND-1 & pol α chromatin association.(A) Representative images of preextracted HeLa cells used to measure chromatin-associated AND-1. DAPI: blue, AND-1: red. Scale bar = 12.5 µm. (B) Dot plots of mean AND-1 intensity per nuclei in AFU for each cell line, as indicated. Black line & numbers below the graph indicate the mean AFU. Error bars indicate the ±SEM of three independent biological experiments. (C) Western blot analysis showing chromatin fractions from HCT116 cells. Ponceau S & histone H3 were used as loading controls. AND-1 & pol α levels were normalized to H3 levels & then normalized to the shNT control. (D) Co-IP was performed with Flag or HA antibody in cell lysates from HEK 293T cells, as indicated. 5% input was loaded as a control. For +HU samples in (B) & (D), HU was added 2 h before collection. Data are representative of three independent biological experiments. n indicates the number of total nuclei scored. P-values were calculated by an unpaired, two-tailed Mann–Whitney test in (B) & t test in (C) (\*\*\*\*P ≤ 0.0001, \*\*P ≤ 0.01). Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/30979824). licensed under a CC-BY license. Not internally tested by Novus Biologicals.

Immunocytochemistry/ Immunofluorescence: WDHD1 Antibody [NBP1-89091] - CST is required for AND-1 & pol α chromatin association.(A) Representative images of pre-extracted HeLa cells used to measure chromatin-associated AND-1. DAPI: blue, AND-1: red. Scale bar = 12.5 μm. (B) Dot plots of mean AND-1 intensity per nuclei in AFU for each cell line, as indicated. Black line & numbers below the graph indicate the mean AFU. Error bars indicate the ±SEM of three independent biological experiments. (C) Western blot analysis showing chromatin fractions from HCT116 cells. Ponceau S & histone H3 were used as loading controls. AND-1 & pol α levels were normalized to H3 levels & then normalized to the shNT control. (D) Co-IP was performed with Flag or HA antibody in cell lysates from HEK 293T cells, as indicated. 5% input was loaded as a shSTN1-RES control. For +HU samples in (B) & (D), HU was added 2 h before collection. Data are representative of three independent biological experiments. n indicates the number of total nuclei scored. P-values were calculated by an unpaired, two-tailed Mann-Whitney test in (B) & t test in (C) (\*\*\*\* $P \le 0.0001$ , \*\* $P \le 0.01$ ). Image collected & cropped by CiteAb from the following publication

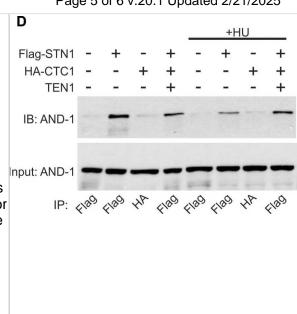
(https://pubmed.ncbi.nlm.nih.gov/30979824), licensed under a CC-BY license. Not internally tested by Novus Biologicals.







Western Blot: WDHD1 Antibody [NBP1-89091] - CST is required for AND-1 & pol α chromatin association.(A) Representative images of preextracted HeLa cells used to measure chromatin-associated AND-1. DAPI: blue, AND-1: red. Scale bar = 12.5 µm. (B) Dot plots of mean AND-1 intensity per nuclei in AFU for each cell line, as indicated. Black line & numbers below the graph indicate the mean AFU. Error bars indicate the ±SEM of three independent biological experiments. (C) Western blot analysis showing chromatin fractions from HCT116 cells. Ponceau S & histone H3 were used as loading controls. AND-1 & pol α levels were normalized to H3 levels & then normalized to the shNT control. (D) Co-IP was performed with Flag or HA antibody in cell lysates from HEK 293T cells, as indicated. 5% input was loaded as a control. For +HU samples in (B) & (D), HU was added 2 h before collection. Data are representative of three independent biological experiments. n indicates the number of total nuclei scored. P-values were calculated by an unpaired, two-tailed Mann–Whitney test in (B) & t test in (C) (\*\*\*\*P ≤ 0.0001, \*\*P ≤ 0.01). Image collected & cropped by CiteAb from the following publication (https://pubmed.ncbi.nlm.nih.gov/30979824), licensed under a CC-BY license. Not internally tested by Novus Biologicals.



#### **Publications**

Ana G, Bernardo O, Marco N et al. Micronuclei from misaligned chromosomes that satisfy the spindle assembly checkpoint in cancer cells. Curr Biol. 2022-08-27 [PMID: 36057259]

Scaramuzza, S;Jones, RM;Sadurni, MM;Reynolds-Winczura, A;Poovathumkadavil, D;Farrell, A;Natsume, T;Rojas, P;Cuesta, CF;Kanemaki, MT;Saponaro, M;Gambus, A; TRAIP resolves DNA replication-transcription conflicts during the S-phase of unperturbed cells Nature communications 2023-08-21 [PMID: 37604812]

Wang Y, Brady K S et al. Human CST suppresses origin licensing and promotes AND-1/Ctf4 chromatin association. Life Sci Alliance 2019-01-04 [PMID: 30979824] (ICC/IF, WB, Human)

Simon AK, Kummer S, Wild S et al. The iron-sulfur helicase DDX11 promotes the generation of single-stranded DNA for CHK1 activation Life Sci Alliance 2020-03-01 [PMID: 32071282] (WB, Human)

Chen Y, Liu H, Zhang H et al. And-1 coordinates with CtIP for efficient homologous recombination and DNA damage checkpoint maintenance. Nucleic Acids Res. 2016-12-09 [PMID: 27940552] (ICC/IF, WB, Human)

Sato N, Koinuma J, Fujita M et al. Activation of WD repeat and high-mobility group box DNA binding protein 1 in pulmonary and esophageal carcinogenesis. Clin Cancer Res 2010-01-01 [PMID: 20028748]





## **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 NBP1-89091**

NBP1-89091PEP WDHD1 Recombinant Protein Antigen

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

Earn gift cards/discounts by submitting a review: www.novusbio.com/reviews/submit/NBP1-89091

Earn gift cards/discounts by submitting a publication using this product: www.novusbio.com/publications

