

Product Datasheet

RNA Polymerase II/POLR2A [p Ser2] Antibody NB100-1805

Unit Size: 0.1 ml

Store at 4C. Do not freeze.

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NB100-1805**RNA Polymerase II/POLR2A [p Ser2] Antibody**

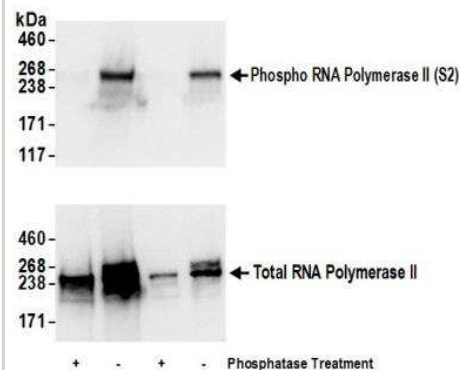
Product Information	
Unit Size	0.1 ml
Concentration	0.2 mg/ml
Storage	Store at 4C. Do not freeze.
Clonality	Polyclonal
Preservative	0.09% Sodium Azide
Isotype	IgG
Purity	Immunogen affinity purified
Buffer	TBS and 0.1% BSA

Product Description	
Host	Rabbit
Gene ID	5430
Gene Symbol	POLR2A
Species	Human, Mouse, Yeast
Reactivity Notes	Yeast reactivity reported in scientific literature (PMID: 25416796).
Specificity/Sensitivity	RNA Polymerase 2 Phosphospecific [Ser2]
Immunogen	Immunogen for this antibody was a phosphorylated synthetic peptide, which represented a portion of human RNA Polymerase II (GeneID 5430) around serine 2 of the C-terminal repeat YSPTSPS.

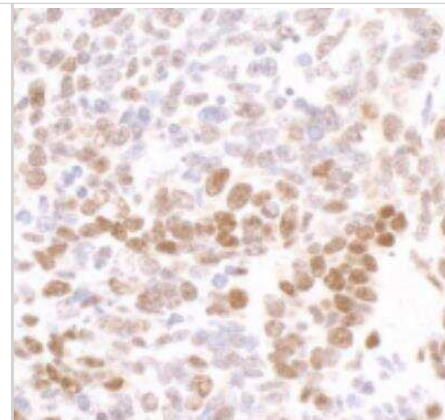
Product Application Details	
Applications	Western Blot, Immunohistochemistry, Immunohistochemistry-Paraffin, Immunoprecipitation, Single Cell Western
Recommended Dilutions	Western Blot 1:2000-1:10000, Immunohistochemistry 1:200 - 1:1000, Immunoprecipitation 2-10 mg/mg, Immunohistochemistry-Paraffin 1:200 - 1:1000, Single Cell Western 100 ug/mL
Application Notes	Epitope retrieval with citrate buffer pH6.0 is recommended for FFPE tissue sections.

Images

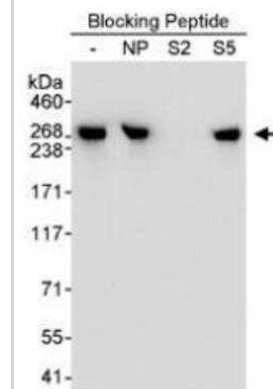
Western Blot: RNA Polymerase II/POLR2A [p Ser2] Antibody [NB100-1805] - Detection of Human Phospho RNA Polymerase II (S2) by Western Blot. Samples: Whole cell lysate (50 and 15 ug) from HeLa prepared using NETN buffer. Lysate was mock treated (-) or treated with phosphatases (+). Antibodies: Affinity purified rabbit anti-Phospho RNA Polymerase II (S2) antibody NB100-1805 was used for WB at 0.04 ug/ml (upper panel). To examine total RNA Polymerase II, rabbit anti-RNA Polymerase II antibody was used at 1 ug/ml (lower panel). Detection: Chemiluminescence with exposure time of 3 seconds.



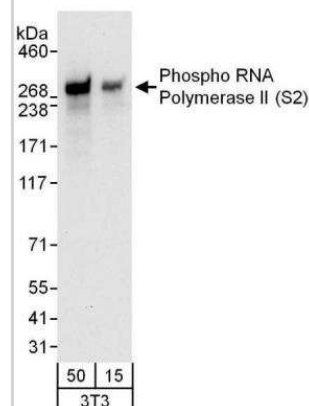
Immunohistochemistry-Paraffin: RNA Polymerase II/POLR2A [p Ser2] Antibody [NB100-1805] - Section of mouse teratoma. Antibody: Affinity purified rabbit anti-PhosphoRNA Polymerase II (S2) used at a dilution of 1:200 (1ug/ml). Detection: DAB



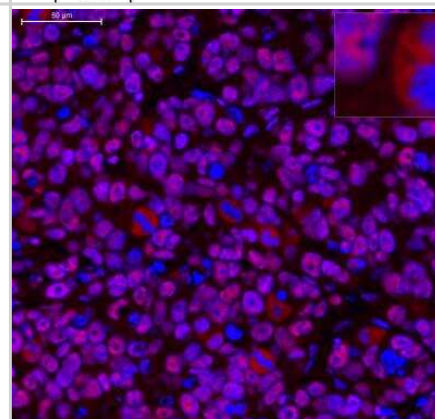
Western Blot: RNA Polymerase II/POLR2A [p Ser2] Antibody [NB100-1805] - Hela whole cell lysate (50 ug each lane) loaded and probed by anti-RNA polymerase II Antibody. NB100-1805 was pre-incubated without peptide (-), with non-phosphorylated peptide (NP), with phosphorylated S2 peptide, or with phosphorylated S5 peptide.



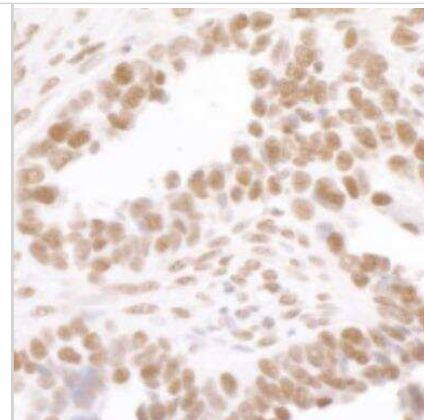
Western Blot: RNA Polymerase II/POLR2A [p Ser2] Antibody [NB100-1805] - Whole cell lysate (15 and 50 ug) from NIH3T3 cells. Antibody used at 0.08 ug/ml.



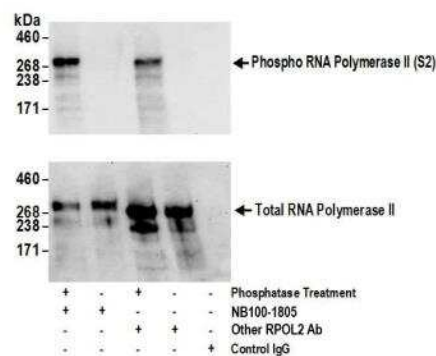
Immunohistochemistry-Paraffin: RNA Polymerase II/POLR2A [p Ser2] Antibody [NB100-1805] - Analysis of POLR2A in MCF-7 xenograft using anti-POLR2A [p Ser2] antibody. Image from verified customer review.



Immunohistochemistry-Paraffin: RNA Polymerase II/POLR2A [p Ser2] Antibody [NB100-1805] - Human ovarian carcinoma. Antibody: Affinity purified rabbit antiPhospho-RNA Polymerase II (S2) used at a dilution of 1:1000 (0.2ug/ml). Detection: DAB



RNA Polymerase II/POLR2A [p Ser2] Antibody [NB100-1805] - Detection of Phospho RNA Polymerase II (S2) by western blot of immunoprecipitates. Samples: Whole cell lysate (0.5 or 1 mg per IP reaction, 20% of IP loaded) from HeLa cells prepared using NETN lysis buffer. immunoprecipitates were either phosphatase treated (+) or mock treated (-). Antibody: Affinity purified rabbit anti-Phospho RNA Polymerase II (S2) antibody NB100-1805 used for IP at 5 ug per reaction and another Affinity purified rabbit anti-RNA Polymerase II antibody used for IP at 5 ug per reaction. For blotting immunoprecipitated Phospho RNA Polymerase II (S2) and total RNA Polymerase II, NB100-1805 was used at 0.1 ug/ml (upper panel) and the other antibody was used at 1 ug/ml (lower panel). Detection: Chemiluminescence with an exposure time of 10 seconds (upper) and 75 seconds (lower).



Publications

Zhang B, Li Y, Zhang J et al. ADAR1 links R-loop homeostasis to ATR activation in replication stress response *Nucleic acids research* 2023-10-13 [PMID: 37831098]

Igarashi T, Mazevet M, Yasuhara T et al. An ATR-PrimPol pathway confers tolerance to oncogenic KRAS-induced and heterochromatin-associated replication stress *Nature Communications* 2023-08-17 [PMID: 37591859]

Schultz M, Wangen C, Sommerer M et al. Cytomegalovirus cyclin-dependent kinase ortholog vCDK/pUL97 undergoes regulatory interaction with human cyclin H and CDK7 to codetermine viral replication efficiency *Virus Research* 2023-10-02 [PMID: 37591314] (Block/Neutralize)

Brown RE, Su XA, Fair S et al. The RNA export and RNA decay complexes THO and TRAMP prevent transcription-replication conflicts, DNA breaks, and CAG repeat contractions *PLoS biology* 2022-12-27 [PMID: 36574440] (PLA, Yeast)

Matos DA, Zhang JM, Ouyang J et al. ATR Protects the Genome against R Loops through a MUS81-Triggered Feedback Loop *Mol. Cell* 2019-10-28 [PMID: 31708417]

Tong Z, Mejia A, Veeranki O et al. Targeting CDK9 and MCL-1 by a new CDK9/p-TEFb inhibitor with and without 5-fluorouracil in esophageal adenocarcinoma *Ther Adv Med Oncol* 2019-01-01 [PMID: 31384313] (WB, Human)

Tong Z, Chatterjee D, Deng D et al. Antitumor effects of cyclin dependent kinase 9 inhibition in esophageal adenocarcinoma. *Oncotarget* 2017-04-25 [PMID: 28404924] (WB, Human)

Allepuz-Fuster P, Martinez-Fernandez V, Garrido-Godino Ai et al. Rpb4/7 facilitates RnA polymerase II CTD dephosphorylation. *Nucleic Acids Res.* 2014-11-21 [PMID: 25416796] (WB, Yeast)

Wang X, Hsueh YP, Li W et al. Sex-induced silencing defends the genome of *Cryptococcus neoformans* via RNAi. *Genes Dev* 2010-11-01 [PMID: 21078820]

Yoon YJ, Kim JA, Shin KD et al. KRIBB11 inhibits HSP70 synthesis through inhibition of heat shock factor 1 function by impairing the recruitment of positive transcription elongation factor b to the hsp70 promoter. *J Biol Chem* 2011-01-01 [PMID: 21078672]

Garrido-Lecca A, Blumenthal T. RNA polymerase II C-terminal domain phosphorylation patterns in *Caenorhabditis elegans* operons, polycistronic gene clusters with only one promoter. *Mol Cell Biol* 2010-08-01 [PMID: 20498277]

Ma Y, Chen L, Wright GM et al. CDKN1C negatively regulates RNA polymerase II C-terminal domain phosphorylation in an E2F1-dependent manner. *J Biol Chem* 2010-03-01 [PMID: 20106982]

More publications at <http://www.novusbio.com/NB100-1805>





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Products Related to NB100-1805

HAF008	Goat anti-Rabbit IgG Secondary Antibody [HRP]
NB7160	Goat anti-Rabbit IgG (H+L) Secondary Antibody [HRP]
NBP2-24891	Rabbit IgG Isotype Control
H00005430-Q01-10ug	Recombinant Human RNA Polymerase II/POLR2A GST (N-Term) Protein

Limitations

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